# Conflict Trends and Conflict Drivers

An Empirical Assessment of Historical Conflict Patterns and Future Conflict Projections

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## **Preface**

This report documents the results of the Emergence of New Conflict Trends project. Using empirical evidence, the project aimed to identify post—Cold War operational trends in armed conflict and the global strategic trends that characterize and influence the environments in which conflict takes place. The project also had the specific goal of identifying the conditions under which a change toward greater state-on-state conflict might take place. The analysis was conducted to support the Army leadership on issues pertaining to the future operational environment.

The report should be of interest to intelligence analysts and military planners concerned with long-term Army planning—and U.S. armed forces planning in general. Research for this project was conducted from October 2012 through September 2013. The report was reviewed and revised in 2014, and updated in July and August of 2016.

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#### The Research Question

The incidence of armed conflict has declined both in number and intensity since the end of the Cold War. The trends are especially clear for interstate war, but intrastate conflict also has declined. From being a "normal" and common feature of the international state system in the 1970s, interstate war has declined to an anomaly. Civil wars, insurgencies, and other forms of intrastate conflict have also declined from being numerous and deadly in the 1980s to being less lethal and more infrequent, notwithstanding an uptick in such conflict in 2013–2015. While there is a general consensus among conflict studies scholars that armed conflict has decreased over the past two decades, and there have been many hypotheses put forth about why there is less armed conflict in the world, there is no conclusive answer as to why this has happened. Moreover, there is the potential that, as previous causes of conflict have diminished in intensity, new causes (linked to globalization, population stress, and environmental change) may lead to a reversal of the trends in incidence and intensity of conflict.

The Army has a fundamental interest in understanding any changes in the nature and incidence of conflict and the future operating environment because it needs to be ready for potential contingencies. Consequently, the Army asked RAND Arroyo Center for analytical assistance. The main research questions were:

- What are the post–Cold War trends in armed conflict?
- What are the global strategic trends that characterize and influence the environments in which conflict takes place?
- Are there any trends that might portend a change toward increased interstate conflict?

Put in a most parsimonious fashion, the question we examined was: What have the trends in conflict been, why they have changed, and what can we expect in the future?

## **Implications**

Overall levels of conflict have been declining for the past two decades. These declines reflect increases in structural conflict deterrents—such as countries' capacities to govern and their commitments to democratic norms and international norms for dispute settlement, international organizations and economic interdependence—as well as declines in conflict triggers, such as low economic growth and ethnic and sectarian polarization. These trends have been mitigated somewhat by declining U.S. preeminence. Our baseline, "no surprises" projections suggest that a continuing decline in conflict is the most likely future trend. If this is the case, what is the role of

the Army in ensuring that it is prepared to contribute to the continuation of the trends and to face the emerging challenges?

Looking to the future, the Army will continue to play important roles in reinforcing these declines in armed conflict. To prevent future interstate conflict, the U.S. armed forces, including the Army, are essential in ensuring U.S. preeminence, providing a credible enforcement tool for upholding U.S.-backed international norms, strengthening international organizations, and influencing partner militaries so as to enable successful democratic transitions. To prevent future intrastate conflict, the U.S. armed forces, and especially the Army, play an important role in U.S. efforts designed to increase the capacity of partner-state institutions, influence partner militaries to enable successful democratic transitions (e.g., by helping to reinforce the norm of civilian supremacy), and field forces that can uphold U.S. preeminence, U.S.-backed international norms, and strong international organizations.

In terms of implications for future Army operating environments, although our projections indicate that interstate conflict may be rare in the future, the United States must retain a ready and credible land power deterrent to ensure such a future. Such a deterrent might not be used frequently in interventions against state opponents, but the United States needs to retain it because the very existence of such a deterrent delays the rise of a challenger and has a dampening effect on the incidence of conflict. If a challenger to the United States were to arise and a major power rivalry were to develop, it would become more commonplace for the U.S. armed forces to face state opponents and participate in some form in interstate conflicts as part of proxy wars. Assuming validation of our range of projections, an absence of unexpected shocks, and a faster-than-baseline pace of decline of U.S. preeminence, such a future may become viable by 2025.

Our projections also indicate that intrastate conflict will continue to be the main form of conflict incidence and, given the U.S. position in the international state system, Army forces are likely to become engaged in such conflicts. The trends toward a decrease in conflict incidence, including intrastate conflict, do not necessarily mean a lower rate of incidence of U.S. interventions. Intervention frequency and duration may differ depending on the views of the specific policy preferences of the executive branch in power, but the structural nature of the need for U.S. intervention will remain. Given the predominance of intrastate conflict as the main form of conflict, we draw the conclusion that U.S. interventions are likely to be mainly in intrastate conflicts. Having a force capable of such operations will strengthen the United States' overall deterrence, enable more effective action as part of an intervention by an international organization, and make international norms more credible.

What all of this suggests is that while the Army must be ready for interstate conflict and must have the type of forces associated with fighting state actors, Army forces are more likely to be engaged in intrastate conflicts and forces must be ready for the operational environments typically associated with intergroup (ethnic, sectarian) conflicts and insurgencies.

The specific operational environments can be evaluated using the exploratory analysis tool we developed. The tool puts an enormous amount of data for use in experimentation at the fingertips of Army analysts, and it allows the Army to elaborate and war-game a number of futures that are based on empirical trends and are theoretically sound. It also offers the Army the potential to analyze counters to any emerging threats and to structure its forces accordingly.

## Approach

For purposes of establishing conflict trends, we used data from 1946 through 2015. We examined every major conflict database, as well many lesser-known conflict-specific databases. We examined both the incidence and intensity of conflict for both interstate and intrastate conflict and we compared patterns across the databases. To understand reasons for changes in conflict patterns over time, we conducted an extensive literature review, focusing on material that uses empirical and scientific approaches to conflict. Based on the review, we identified ten key factors that have had the strongest effect on the incidence of armed conflict globally. We developed metrics for each of the key factors and used them to make projections regarding trends in the key factors. Throughout our research, the time frame for our projections is the period 2016–2040.

To develop projections about future incidence of conflict, we adjusted projections of conflict trends based on the projections we made for each of the key factors for incidence of conflict. This step led us to revised conflict projections that took into account historical conflict trends, key factors for incidence of armed conflict, and projections of future trends for each of the key factors. For purposes of assessing the potential impact of simultaneous changes in several key factors, we developed the Alternative Futures Tool, which we used to examine 1,160 possible combinations of changes in the direction and magnitude of the key factors. We identified the most conflict-prone futures and their signposts.

## **Findings**

#### Trends in Conflict

The main finding from our empirical analysis of conflict trends is that overall levels of conflict have been declining in the past two decades, notwithstanding the increases in certain types of conflict since 2012. The nature, intensity, and frequency of conflict also have changed since the end of the Cold War, shifting from wars fought between states to various forms of intrastate violence. Interstate violence has decreased the most, both in the incidence and intensity of armed conflict. From its peak in the late 1970s and 1980s, interstate conflict has declined (see Figure S.1) so that its incidence is increasingly rare and occurs mostly at medium and low intensities. It has reached very low levels in recent years, but still occurs sporadically.

Number of countries with interstate conflict Year ——Low Intensity ——Medium Intensity ——High Intensity ——All Interstate Conflict

Figure S.1. Countries with Ongoing Interstate Conflicts, by Intensity, 1946–2015

SOURCE: Monty G. Marshall, *Major Episodes of Political Violence (MEPV) and Conflict Regions 1946–2015*, Center for Systemic Peace, 2016.

Intrastate conflict and low-intensity violence have declined more slowly, but have also generally decreased in incidence and intensity. Intrastate conflict peaked in the early 1990s and took a downward trajectory from there, although there has been a noticeable increase in the past couple of years, particularly in low- and medium-intensity intrastate conflict (see Figure S.2). In any event, a much greater percentage of conflict within the international system now takes place within states rather than between states (see Figure S.3).

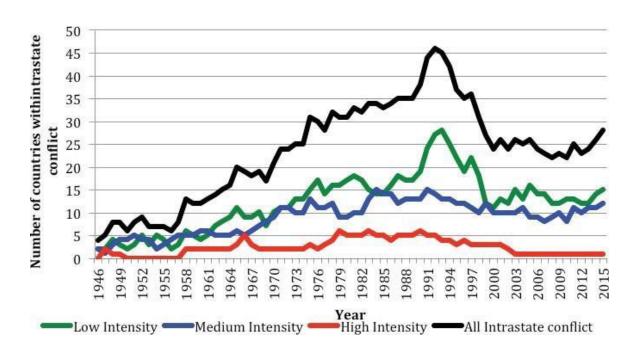


Figure S.2. Countries with Ongoing Intrastate Conflicts, by Intensity, 1946–2015

SOURCE: Marshall, 2016.

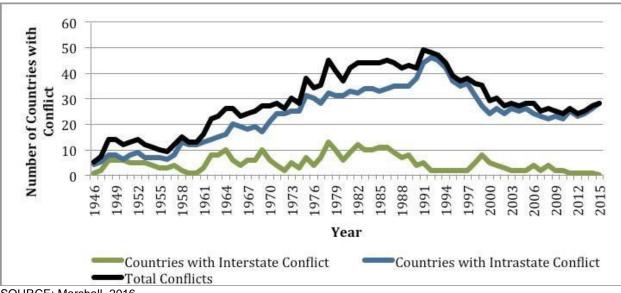


Figure S.3. Countries with Ongoing Interstate and Intrastate Conflicts, 1946 –2015

SOURCE: Marshall, 2016.

What is especially interesting is that the same patterns emerged no matter what databases we used. The data sets measure conflict differently, but the similarity of trends regardless of which database we consulted gives us confidence in our findings. At least in terms of fatalities

stemming from political violence, the world is a much safer place than it has been for many decades.

#### Key Factors in Change in Conflict Patterns

We identified ten key drivers of change in conflict incidence. Some have a greater impact than others. Table S.1 summarizes the impact of the key factors on future incidence of conflict relative to our baseline conflict projections. The first column in Table S.1 lists the ten key factors. The second column identifies the expected effect of an *increase* in each factor on our projections of *interstate* conflict. For example, an increase in the prevalence of consolidated democracies is expected to result in a lower incidence of interstate conflict than predicted in our baseline projections (green in Table S.1), while an increase in ethnic and sectarian polarization is expected to create a slight increase in the incidence of interstate conflict (orange in Table S.1). The third column captures the expected effect of a *decline* in each of the key factors on our projections of *interstate* conflict. For example, a decline in U.S. preeminence is expected to result in an incidence of interstate conflict above that predicted in our baseline projections (red in Table S.1). Columns 4 and 5 present the expected effect of increases and decreases in each factor on the incidence of *intrastate* conflict relative to our baseline projection of conflict, respectively.

Table S.1. Expected Effect of Change in Key Factors on Conflict Incidence Relative to RAND Conflict Projections

	Expected Effect of Change in Factor on Conflict Incidence			
	Interstate Conflict		Intrastate Conflict	
Key Factors	Increase in Key Factor	Decrease in Key Factor	Increase in Key Factor	Decrease in Key Factor
Capacity of state institutions				
Degree of ethnic and sectarian polarization				
Prevalence of consolidated democracies				
Rate of economic growth				
Extent of economic interdependence				
Capabilities of international organizations				
Degree of U.S. preeminence				
Strength of international norms				
Diffusion of lethal technology				
Extent of resource stress because of population pressures				
Less conflict Slightly less conflict No effect Slightly more conflict More conflict				

As Table S.1 indicates, the impact of some of the key factors is concentrated on interstate, rather than intrastate conflict. Other key factors have an impact predominantly on intrastate conflict. A few key factors have a strong impact on both types of conflict.

For interstate conflict, the key conflict drivers we identified are the prevalence of consolidated democracies, the capabilities of international organizations, and the degree of U.S. preeminence. Of these three key factors, our projection is that of a continued strengthening of democratic consolidation and international organization growth globally. In contrast, a continued decline is the projected trend in U.S. preeminence; this emerges as a concern in this analysis for the future incidence of interstate conflict. Loss of interstate conflict deterrence that might result from a decline in U.S. preeminence could be offset by an increase in the prevalence of consolidated democracies and the capabilities of international organizations.

For intrastate conflict, the key conflict drivers are the capacity of state institutions and the rate of economic growth. Both factors have been trending upward over time, and our projection is that these trends will continue. However, these factors are closely intertwined. Weak institutional capacity reduces countries' economic opportunities, while weak economic growth reduces governments' resources to increase governance. As a result, declines in these two factors would create vulnerabilities that we expect to increase intrastate conflict and they would be difficult to mitigate.

#### Future Projections of Conflict

We developed baseline projections about the most likely future interstate and intrastate conflict trends. These projections represent a 'no surprises' baseline future in which the ten key factors identified as conflict drivers maintain their projected trends.

The baseline interstate conflict projection is presented in Figure S.4 and the baseline intrastate conflict projection is presented in Figure S.5. Each figure displays the historic time series, a smoothed trend line, and the baseline projection for the total number of conflicts for the period considered. In keeping with shifts in the nature of conflict, we built our interstate conflict projection based on data from 1970 through 2015 and our intrastate conflict projection based on data from 1989 through 2015. We chose 1970 as the cut-point for interstate conflict because it marks the beginning of the "modern" interstate system, post-decolonization. The 1970 cut-point also accords well with longer-term trends in all drivers of interstate conflict, which suggested a reduced likelihood of violence. On the intrastate side, we chose 1989 rather than 1970 as the cutpoint for several reasons. The most significant rationale has to do with the role of proxy conflicts during the Cold War, which greatly inflamed the likelihood of intrastate conflict during this period. It is only after these involvements ended (after the Cold War) that the most relevant trend going forward can be seen. The 1989 cut-point also marked the beginning of the post-Cold War era and a shift in the drivers, nature, and intensity of intrastate conflict. We extend the interstate and intrastate projections to 2040. The full trend line for the entire period is in purple and the dotted line illustrates the projection. The dotted line and the purple line overlap during the projection period (2016–2040), reflecting the fact that the projection and the trend line extended past 2015 are the same.

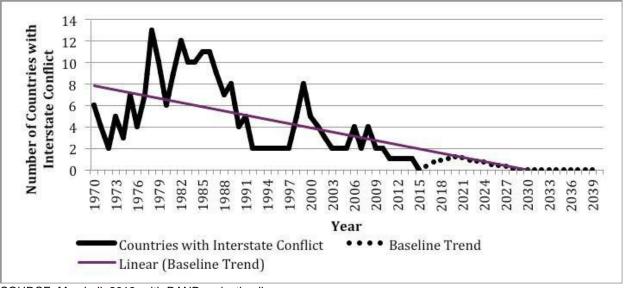


Figure S.4. Countries with Ongoing Interstate Violence Past and Future, 1970 -2040

SOURCE: Marshall, 2016, with RAND projection line.

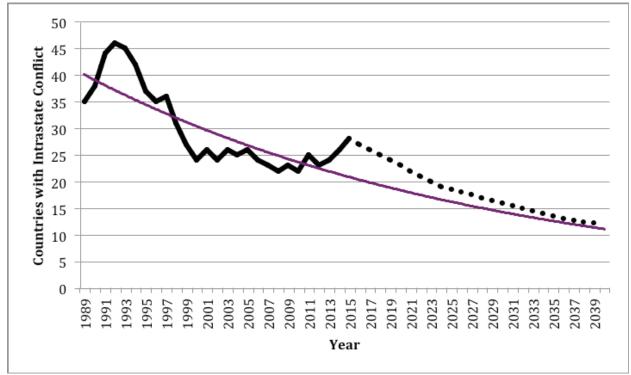


Figure S.5. Countries with Ongoing Intrastate Violence Past and Future, 1989 -2040

SOURCE: Marshall, 2016, with RAND projection line.

Both the interstate and intrastate baseline future conflict projections depict a continued decline through 2040. The projection leads to an especially low incidence of interstate conflict. The intrastate conflict trend projects a significant and gradual decline, but one that could be reversed by any number of shocks or changes within the international system. Taken together, these baseline projections of conflict incidence suggest that a smaller number of conflicts are likely to remain by 2040 and that they are likely to be primarily intrastate.

Although the baseline projections reflect our projection of future conflict trends, we note that divergence from the baseline projection is likely. Our projections are a major part of our analytical exercise to understand the potential for future conflict incidence, but all projections beyond the immediate future are subject to modification because of different paces of expected incremental change, as well as unexpected sudden discontinuities. Therefore, using the Alternative Futures Tool, we identified the alternative futures that embody greater expectations of future conflict than the baseline projections and considered what could be done to mitigate the effect of conflict drivers.

The three factors that most strongly increased interstate conflict expectations were declining U.S. preeminence, declining capabilities of international organizations, and declining prevalence of consolidated democracies. Of the three factors, we expect that a decline in the prevalence of consolidated democracies would be the most difficult to offset, as the only conflict-mitigating factor that our assessment identified as comparable in strength to its decline is an increase in

economic interdependence. However, the prevalence of consolidated democracies and economic interdependence have tended to co-vary historically. As a result, we find it unlikely that economic interdependence will increase in a future in which the prevalence of consolidated democracies is decreasing. In contrast, declining U.S. preeminence can be offset by increases in democratization or a strengthening of the capabilities of international organizations, neither of which co-vary strongly with U.S. preeminence.

We expect that the incidence of intrastate conflict will increase if the capacity of state institutions or the rate of economic growth declines. This combination of key factors is of particular concern for the future of intrastate conflict because of the strong relationship between the strength of state institutions and the rate of economic growth. It is exceedingly difficult to strengthen institutions in poor economic conditions (i.e., with extremely weak fiscal bases) and almost impossible to achieve sustainable economic growth in the absence of state institutions. Thus, strong state institutions and economic growth tend to go together, which reduces the effectiveness of available options for mitigating intrastate conflict in countries with weak state institutions and low economic growth, and may in part explain the greater persistence of intrastate conflict compared with interstate conflict in the system. We also expect that violent intrastate conflict is likely to continue to exhibit the intercommunal character—such as interethnic or interconfessional war—that has been common in the post-Cold War period.

#### Caveats

There are a number of caveats to our findings. First, the trend toward lower conflict incidence does not necessarily imply a commensurate reduction in the number of U.S. military interventions, as the two trends are not directly related. In fact, lower overall incidence of conflict also may entail a higher propensity toward U.S. intervention behavior. Even though the specifics of U.S. interventions may be idiosyncratic, the structural reasons for U.S. international behavior shape the overall pattern of interventions, and these are projected to continue.

Second, the global trend toward lower incidence of conflict may not be uniform and may not hold evenly across all regions. Incidence of conflict in one region may drop precipitously while rising or remaining the same in another region, even if the trends in key factors are the same in both regions.

Third, there is a limitation to the existing databases: They focus on politically motivated violence, but criminally motivated violence in parts of the world is so high that it dwarfs the fatality levels associated with most ongoing insurgencies, including in Afghanistan. At some level, criminal violence becomes political in that it illustrates the inadequacy of existing political institutions and exposes the inability of the state to provide citizens with the most basic public good—security.

Fourth, our research approach allows us to examine trends in the future incidence of conflict if no critical factors change in profound and highly unexpected ways. Our approach also allows us to study divergences from past trends that can reasonably be anticipated—for instance, the

slowing of the global economy or setbacks in the general trend toward the diffusion of democracy around the world. It does not, however, enable us to anticipate *shocks*, changes that currently appear highly improbable but that would have a massive impact on international affairs if they were to transpire. One example would be the rapid spread of highly lethal technologies such as weaponized, highly contagious pathogens ("super bugs"). Alternatively, the most dire climate-change scenarios might also fundamentally change the extent of violent conflict. Although our research approach allows the reader to examine the implications of a "no surprises" future and anticipatable alternative futures, readers should bear in mind that low-probability but high-impact shocks become increasingly likely the further into the future that projections are made.

## Acknowledgments

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Julie Ann Tajiri and Lisa Turner formatted the document.

## **Abbreviations**

CNTS Cross National Time Series

COW Correlates of War

EPR Ethnic Power Relations data set

GDP gross domestic product
GTD Global Terrorism Database
ICB International Crisis Behavior

MEPV Major Episodes of Political Violence

MID Militarized Interstate Disputes

MTOPS Multilateral Treaties of Pacific Settlement dataset

PITF Political Instability Task Force

START Study of Terrorism and Responses to Terrorism

UCDP Uppsala Conflict Data Program

UN United Nations

UNODC United Nations Office of Drugs and Crime

VAR vector auto-regression WHO World Health Organization

## 1. Introduction

## **Background and Research Questions**

Globally, the number of violent conflicts has declined since the end of the Cold War. Very few state-on-state militarized conflicts remain, and most of the conflicts around the world are intrastate insurgencies and civil wars, some of which have become internationalized. Whereas there were at least half a dozen—and sometimes as many as a dozen—interstate wars going on at any one time during the 1960s, 1970s, and 1980s, the number has declined since the end of the Cold War, so that currently interstate wars are an anomaly rather than a regular feature of the international state system. Similarly, there has been a decline in intrastate conflicts, although the decline has not been as sharp as for interstate conflicts.

What do these trends over the past two decades portend for the future? Are they mere aberrations, likely to be reversed in the coming years with a return to higher levels of conflict (and is the recent uptick in intrastate conflict a harbinger of that new trend)? Or do they reflect durable changes rooted in a gradual but fundamental change in the nature of conflict? These questions have become the subject of debate among social scientists and historians in recent years. The answers to these questions and their implications, however, are anything but purely academic.

The Army, along with other services, has a fundamental interest in understanding any changes in the nature and incidence of conflict, as it needs to be ready for future contingencies. Myriad decisions go into manning, equipping, organizing, and training military units to respond quickly and effectively to future contingencies. Understanding the future operating environment is an essential aspect of the Army's preparation. There is often a long lag time between when military decisions are made and when they can be fully implemented, particularly in the development of adequate numbers of senior leaders and the design, development, and acquisition of equipment.

Consequently, the Army asked RAND Arroyo Center for analytical assistance in assessing this debate and its implications for the Army. Specifically, the project had the following objectives:

- Identify post—Cold War operational trends in armed conflict and the global strategic trends that characterize and influence the environments in which conflict takes place.
- Using empirical evidence, assess the claims regarding changing patterns of conflict.

<sup>1</sup> For a recent overview of the literature supporting this claim, see Human Security Report Project, *The Decline in Global Violence: Evidence, Explanation, and Contestation*, Vancouver: Simon Fraser University, 2013, Chapter 1. The following section details the data and analyses underlying these claims.

- Identify any trends that may portend a change in the number of state-on-state conflicts.
- Provide the Army with tools for assessing emergent conflict trends.

Our time frame for projections made in this research is the period 2016–2040. This research should help the community of defense practitioners—and especially Army planners responsible for devising future war games and conducting long-term force structure and acquisitions planning—better understand how violent conflict is likely to evolve in the next several decades.

#### The Debate

The two World Wars understandably shaped the study of world affairs for decades. Much of the American study of international relations was shaped by the overriding imperative to avoid a third such conflagration—especially since it would occur in the nuclear era. The American wars in Korea and Vietnam further reinforced the perception that peace was largely elusive and fragile when achieved.

This focus, however, obscured a slowly evolving but remarkable trend in global politics: a decades-long absence of war among major powers. The Yale historian John Lewis Gaddis dubbed the postwar period "the long peace" and observed that it "now compares favorably . . . with some of the longest periods of great power stability in all of modern history." In the nearly three decades since Gaddis wrote that article, the absence of war among great powers has become all the more remarkable.

By the 2000s, an even broader and more remarkable picture was coming into focus, at least according to some observers. It was not merely war among the great powers that appeared to have been tamed; violent conflict in nearly all of its forms seemed to be declining. Global statistics assembled by the Uppsala Conflict Data Program (UCDP) and the Peace Research Institute Oslo appeared to show that this trend was true of wars among all types of states (interstate conflicts) and true as well—although to a lesser extent—of conflicts within states (intrastate conflicts).<sup>3</sup>

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<sup>&</sup>lt;sup>2</sup> John Lewis Gaddis, "The Long Peace: Elements of Stability in the Postwar International System," *International Security*, Vol. 10, No. 4, Spring 1986, p. 142. The political scientist Jack Levy had earlier argued that great power conflicts were declining in frequency but increasing in severity; see Jack S. Levy, "Historical Trends in Great Power War, 1495–1975," *International Studies Quarterly*, Vol. 26, No. 2, June 1982, pp. 278–300. John Mueller also contributed to this general line of argument in his *Retreat from Doomsday: The Obsolescence of Major War*, New York: Basic Books, 1989.

<sup>&</sup>lt;sup>3</sup> Nils Petter Gleditsch, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand, "Armed Conflict 1946–2001: A New Data set," *Journal of Peace Research*, Vol. 39, No. 5, 2002, pp. 615–637. For more recent research using this and related data, see for instance, Bethany Lacina and Nils Petter Gleditsch, "Monitoring Trends in Global Combat: A New Data set of Battle Deaths," *European Journal of Population*, Vol. 21, No. 2–3, 2005, pp. 145–166; Lotta Harbom and Peter Wallensteen, "Armed Conflicts, 1946–2009," *Journal of Peace Research*, Vol. 47, No. 4, July 2010, pp. 501-509; Halvard Buhaug, Scott Gates, Håvard Hegre and Håvard Strand, "Global Trends in Armed Conflict," Centre for the Study of Civil War, Peace Research Institute Oslo (PRIO), 2007.

While there is a general consensus among conflict studies scholars that armed conflict has decreased over the past two decades, there is less of a consensus in explaining the decrease. Analysts and scholars have proposed many hypotheses to explain the apparent decline in the incidence of interstate conflict:

- The seizure and annexation of land is less rewarding for developed societies (with a predominantly industrial or postindustrial, rather than agricultural, economic base) in an open international economy.
- The enormous military predominance of the United States, a status quo power, means that a country considering an act of military aggression in a strategically important part of the world must anticipate the possibility of a decisive U.S. response.
- The rise of nationalism, spread of "technologies" of violent resistance (such as guerilla warfare), and the widespread availability of small arms and light weapons has made it more difficult to pacify the populations of conquered territories.
- The rise of international consensus and norms against the forceful change of boundaries, accompanied by the commensurate rise of more effective international organizations that can enforce those norms, has made military aggression less attractive.<sup>4</sup>

Similarly, observers have suggested a number of possible explanations for the decline in intrastate conflict:

- The gradual strengthening of state institutions, associated with both a global increase in wealth and with the consolidation of postcolonial political orders, has made states better able to provide services to their populations and to police nonstate violence.
- Rising levels of wealth give a greater proportion of populations a stake in peace.
- The spread of democratic forms of government and associated practices provide institutionalized mechanisms for nonviolent conflict resolution.
- The rise of effective international conflict mediation mechanisms, coupled with a credible threat of external intervention (in particular, peace operations mandated by the United Nations [UN]), has provided both channels and incentives to defuse conflict before it escalates to the level of widespread violence.<sup>5</sup>

The general consensus regarding trends since the 1990s notwithstanding,<sup>6</sup> a number of scholars have challenged the "declinist" thesis. Their criticisms generally take one of two forms:

<sup>6</sup> The above explanations come from scholars who have focused on the changes in conflict trends since the 1980s, which is the majority of the work in this vein. However, there is a strand of the research agenda on incidence of armed conflict that has gained popular prominence and is much broader in scope, namely Steven Pinker's sweeping

<sup>&</sup>lt;sup>4</sup> The literature on all of these points is vast. It is presented in detail in Appendix C. The appendix has been developed as a stand-alone volume and is organized so that it can serve as a quick-reference guide for those interested in understanding the current state of academic debates on a particular alleged cause of violent conflict.

<sup>&</sup>lt;sup>5</sup> Similarly, see stand-alone Appendix C for a review of the literature on the causes of intrastate conflict.

either that the quantitative data have been misrepresented or misinterpreted, or that the apparent trends are in fact only a temporary anomaly and are likely to be undone by a range of new dynamics that are likely to fuel increases in conflict.

Critics of the quantitative methodology underlying the "declinist" argument have challenged how conflict is defined and the timeframe over which conflict trends are observed. For example, using an extremely broad interpretation of *conflict* that includes nonviolent minor disputes, the economists Mark Harrison and Nikolaus Wolf claim that "the frequency of bilateral militarized conflicts among independent states has risen steadily over 131 years from 1870 to 2001." Similarly, Bear Braumoeller, a political scientist at Ohio State University, argues that the apparent decline in interstate war is the result of two alleged mistakes made by proponents of the declinist thesis: The incidence of war is not observed over a sufficiently long period of time, and proponents of declinism adopt an inappropriate measure of the prevalence of armed conflict.<sup>8</sup>

Others suggest that even if the recent decline in violence is real, it is likely to be reversed by one or more of a number of future dynamics:

- Globalization may lead to a quick internationalization of disruptions in one country, raising and magnifying what may be a local dispute to a systemic level.
- Population pressures may lead to greater scarcity and conflict.
- Climate change may induce disruptions and migrations that can overstress the capacity of states and lead to widespread unrest.
- Rapidly evolving technology makes it easier for nonstate actors to organize, and it makes even small numbers of people potentially highly lethal.<sup>9</sup>

Many long-term intelligence forecasts, such as the *Global Trends 2030* paper by the National Intelligence Council, refer to these new sources of conflict.<sup>10</sup>

history of the decline of violence over many *millennia*, positing civilizational and psychological changes at the core of the shift. Steven Pinker, *The Better Angels of Our Nature: Why Violence Has Declined*, New York, N.Y.: Viking Adult, 2011. See, also, the annual publications of the Human Security Report Project, available at the organization's website.

<sup>&</sup>lt;sup>7</sup> Mark Harrison and Nikolaus Wolf, "The Frequency of Wars," *Economic History Review*, Vol. 65, No. 3, 2012, pp. 1055–1076. Despite the title of the article, the authors are actually examining all conflict behavior, including minor disputes in which force was not used. For a forceful response, see Kristian Skrede Gleditsch and Steve Pickering, "Wars Are Becoming Less Frequent: A Response to Harrison and Wolf," *Economic History Review*, Vol. 67, No. 1, 2014, pp. 214–230.

<sup>&</sup>lt;sup>8</sup> Bear Braumoeller, "Is War Disappearing?" paper presented at the annual conference of the American Political Science Association, Chicago, Ill., August 27, 2013.

<sup>&</sup>lt;sup>9</sup> The stand-alone Appendix C provides extensive documentation of all of these claims.

<sup>&</sup>lt;sup>10</sup> National Intelligence Council, *Global Trends 2030: Alternative Worlds*, NIC-2012-001, 2012.

## Research Approach

This project assessed the debate in three steps. First, the research team gathered data on conflict trends from as many sources of aggregate conflict data as could be identified. From this pool of data sources, the researchers selected those data sets that appeared to use reliable sources of data and a transparent methodology for classifying and aggregating conflicts, paying particular attention to ensure that the widest possible range of types of conflict and data sources were represented. If one data set reveals a trend, the finding is interesting, but the reliability of the underlying evidence is always open to question. If multiple data sets using different sources of data, different definitions, and different methodologies all demonstrate consistent trends, the robustness of these findings is greatly improved.

Second, the research team undertook an extensive review of the scholarly literature on the causes of conflict. Without understanding why conflicts occur, it is impossible to assess if recent patterns represent a temporary anomaly or a secular trend that would require a massive shift in global politics to reverse. <sup>11</sup> This review served as the basis for developing ten "key factors" that drive violent conflict, according to a broad consensus of social scientists. Quantitative indicators of each of these factors were also derived.

Third, the research team used the quantitative data on violent conflict and drivers of conflict developed in the first two steps to assess conflict trends through the year 2040. The team first assessed conflict trends using only historical data on the recent incidence of conflict. The team then assessed how changes in any of the ten key factors might lead to changes in the future incidence of conflict. Lastly, the team developed a spreadsheet tool that allows readers of this report to "mix and match" assumptions about future conditions to see how varying these assumptions should be expected to influence the future incidence of conflict.

It is important to highlight the limits of what this research approach can accomplish. The first limitation concerns the time over which we examine conflict trends. The analysis in this report uses only data from the past several decades. Going back further in history would require us to use lower-quality data and would introduce an enormous number of other variables into the analysis. Although the restricted historical range underpinning our analysis is a limitation that should be borne in mind, there are reasons to believe that these trends represent longer-term phenomena. Specifically, our research approach examines the role of a number of key factors in precipitating violent conflict. The observed decline in violence does not occur in a vacuum; it is rooted in changes in a number of critical variables. These variables, in turn, can be observed over much longer periods, and nearly all of them demonstrate long-standing changes that are consistent with our conflict trends and conflict projections.

The second limitation concerns our ability to account for uncertainty. The reliability of predictions degrades rapidly the further into the future they are made. Because of inherently high

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 $<sup>^{11}</sup>$  The results of this literature review are documented in stand-alone Appendix C.

levels of uncertainty, projections about what the future will look like in nearly 30 years are almost certain to be wrong in many important respects. For this reason, long-term planners have frequently made use of planning frameworks such as uncertainty-sensitive planning or robust decisionmaking. 12 Such frameworks allow for the projection of multiple possible futures, including ones in which extremely low-probability but high-impact events radically alter the future landscape. In terms of uncertainty-sensitive planning, this report provides a basis for estimating a baseline or "no surprises" future—the one that will occur if past trends continue in more or less linear fashion. It also provides a foundation for estimating a variety of "branch" scenarios—that is, alternative futures in which one or more key factors vary in ways that are not currently expected but that could be easily imagined, such as growing tensions between the United States and one or more other major powers. This report does not, however, develop socalled "shock" scenarios, such as the realization of the most dire climate change scenarios, the use of biologically engineered pathogens in a catastrophic attack, and so on. Any single such "shock" scenario is highly improbable. Over the course of 30 years, however, the aggregate probability of at least one of these possible shocks occurring is substantial. The fact that our research approach does not allow us to model these outlying scenarios does not reduce the value of the research; developing baseline and branch scenarios is absolutely critical for uncertaintysensitive planning. It is nonetheless a caveat that readers should bear in mind.

## Organization of the Report

The remainder of this report is divided into five chapters. Chapter Two reviews trends in interstate and intrastate conflict since 1946, using a typology to classify conflict type and multiple existing data sets to examine changes in the nature and intensity of conflict, as well as how conflict may be shifting from one form to another. The chapter starts out by defining key terms, including the term "armed conflict," then reviews the various data sets we examined in the course of our research and discusses potential measurement error and other shortcomings of available data. Most of the chapter outlines conflict trends over time, beginning with interstate conflict (looking at armed conflict as well as crises and militarized disputes), then intrastate conflict (focusing on all forms of violence, including one-sided state violence, as well as politically motivated protest that falls short of violence), and finally violence by nonstate actors (including nonstate actor conflicts against each other and terrorism).<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> See especially Paul K. Davis, "Uncertainty-Sensitive Planning," in Stuart E. Johnson, Martin C. Libicki, and Gregory Treverton, eds., *New Challenges, New Tools for Defense Decisionmaking*, Santa Monica, Calif.: RAND Corporation, MR-1576-RC, 2003; and Robert J. Lempert, Steven W. Popper, and Steven C. Bankes, *Shaping the Next One Hundred Years: New Methods for Quantitative, Long-Term Policy Analysis*, Santa Monica, Calif.: RAND Corporation, MR-1626-RPC, 2003.

<sup>&</sup>lt;sup>13</sup> Appendix A contains a more detailed assessment of the data on conflict.

Chapter Three addresses the potential reasons for the changes in conflict type and intensity over time, since 1946. We conducted an extensive literature review to identify the key factors having the strongest effect on the prevalence of interstate and intrastate conflict. Our review focused on literature that uses empirical and scientific approaches to conflict. We identified ten key factors, each of which is discussed in a subsection of the chapter. We operationalized each key factor using quantifiable metrics and then, using those metrics, projected the baseline trends for each factor until 2040. We also took into account expected branch scenarios by outlining the upper and lower bounds of the projections. The chapter discusses the rationale for the bounding of the projections for each factor as well as the potential for discontinuous change in the metric we use for each of the key factors. Finally, the chapter assesses the likely effect of each key factor on future conflict incidence. Appendix C contains a detailed discussion of the literature review.

Chapter Four builds on the empirical analysis in Chapter Two and develops projections about incidence of conflict in the future. The chapter first discusses some of the methodological issues involved in making such projections, then outlines the baseline projections for conflict incidence and intensity for interstate and intrastate conflict. It also provides a sensitivity analysis of the conflict projections presented in Chapter Two that assesses the impact of the expected future trends for each of the ten key factors on the baseline conflict projections. The chapter then presents the revised conflict projections, which stem from both historical conflict trends and projected future trends in key factors affecting conflict. Finally, it discusses findings and projections about the incidence of conflict in the future.

The starting point for Chapter Five is the assumption that all projections are bound to be wrong to some extent, and the further they are into the future, the more likely they are to be wrong. The projections presented in Chapter Four might be a good starting point but we anticipate that the value of our work is to help military planners and analysts better understand conflict drivers for experimentation and wargaming purposes. The chapter discusses our development of a range of alternative futures. We developed an exploratory analysis tool that enables analysts and planners to examine the potential impact of changes of combinations of key factors on future conflict incidence. This tool includes signposts and incorporates all the causal relationships from the work reported in earlier chapters; it also allows for a shortcut to an enormous amount of information and could be used by military planners and analysts for scenario development, wargaming, and experimentation. The chapter then discusses the main findings from our use of this Alternative Futures Tool regarding the impact that changes in several of the key factors are likely to have on the incidence of conflict in the future. We then discuss the expected effects of changes in key factors on both interstate and intrastate conflict, depending on the extent of variance from the expected baseline projections outlined in Chapter Four. We anticipate that this chapter will be of most direct use to Army planners in thinking about future operating environments. Appendix B contains additional information on the Alternative Futures Tool.

Chapter Six summarizes our findings and draws out implications for the Army. It also discusses caveats and some of the main unknowns that could alter some of the projections offered in the report.

As noted above, several appendixes provide supporting material and additional information relevant to our study. The Alternative Futures Tool is available from the authors to authorized requesters.

The project began in October 2012 and a draft report was completed in September 2013. Project team members presented the findings contained in this report to Army and DoD audiences from September to December 2013. The report was reviewed and revised in 2014 and provided to the Army in April 2015. The report was updated in July and August of 2016.

## 2. Overview of Conflict Trends

#### Introduction

The nature, intensity, and frequency of conflict have changed over the past several decades, generally shifting from wars fought directly between states to various forms of "internal" or intrastate violence, including insurgencies, guerilla wars, terrorism, organized and large-scale criminal violence, and protests. However, the timing, speed, and permanence of these shifts have varied and are not uniform for all types of political violence. This chapter reviews trends in interstate and intrastate conflict since 1946 using a typology to classify conflict type and multiple existing data sets to examine changes in the nature and intensity of conflict as well as how conflict may be shifting from one form to another.

#### What Is Conflict?

There is no single, agreed-upon definition of what constitutes armed conflict. Instead, the term may refer to civil war, ethnic war, and interstate war at high and low intensities as well as violence that falls short of war, such as militarized disputes, terrorism, and riots or strikes. Our approach in this report was to be as holistic as possible. Many studies examine particular types of violence or rely on single data sets. Although such approaches may be appropriate for the questions that other observers seek to answer, they were inadequate for our purposes. The U.S. Army must be prepared to respond to contingencies across the entire spectrum of operations, anywhere around the globe, thus, making a full consideration of all types of conflict and violence necessary for our analysis. In addition, as we identified conflict trends and made projections about the future, it was imperative that we develop as robust an empirical basis for these trends and projections as possible. By relying on multiple quantitative databases on conflict, each with its own strengths and weaknesses depending on the peculiarities of how it aggregates diverse phenomena, we were able to develop a more comprehensive and robust picture of past trends and possible futures. The fact that all of the data sets consulted in this review yielded trends that are broadly consistent despite their differences suggests that we have strong reason to believe in the results.

## A Typology of Conflict

As a first step toward the mapping of conflict trends, we developed a typology of violence, illustrated in Table 2.1. The typology is a useful tool in the study of conflict because it identifies, describes, and categorizes different types of political violence across the conflict "concept space" and can be used to discuss changes in the most common types of conflict as well as trends in individual types of violence. We organize our typology along two dimensions: primary actors

and level of intensity. The first dimension focuses on the actors involved in the conflict or violence. Understanding the key actors in armed conflicts and how they change over time is an important characteristic of conflict that provides insight into its motivation, form and intensity, and potential consequences (e.g., regime change, physical destruction). The typology defines several types of conflicts based on primary actors.

**Table 2.1. Typology of Conflict with Examples** 

	-	Intrastate			
	Interstate	One-Sided State	State v. Nonstate	Organized Societal	Spontaneous Societal
High Intensity: Battle deaths of 100,000 per year or 500,000 total	Wars	Genocide, ethnic cleansing	Civil or ethnic war, wars of independence, ethnic cleansing	Ethnic or intercommunal war, ethnic cleansing	
Medium Intensity: Battle deaths of 1,000 per year or 100,000 total	Wars	Genocide, purges, coups	Civil or ethnic war, wars of independence, guerilla war, insurgency	Ethnic or intercommunal war, guerilla warfare	Intercommunal or intracommunal violence, riots, uprisings
Low Intensity: Battle deaths of 25 per year or 1,000 total	Militarized disputes, armed conflict	Extrajudicial killings, disappearances, coups	Civil or ethnic violence, insurgency, guerilla war, extrajudicial killings, riots	Terrorism, guerilla warfare, intercommunal or intracommunal violence	Uprisings, intercommunal or intracommunal violence
Minimum Violence: Battle deaths of 0–25 per year; nonviolent conflict/dispute	Disputes/ crises	Arrests, detentions, government crises	Protests, strikes, demonstrations	Protests, strikes, intercommunal or intracommunal disputes	Strikes, protests, intercommunal or intracommunal disputes

Interstate conflict involves violence between two or more states. Intrastate violence occurs within a single state and can be broken down into many forms. These include:

- one-sided state violence, including genocide, "ethnic cleansing," purges, and extrajudicial (state) killings
- state versus nonstate violence, including civil wars, wars of independence, insurgencies, and some riots
- organized societal violence, such as ethnic or intercommunal war or conflict between two
  nonstate actors in which the state is not a major participant, some types of terrorism,
  some riots, and organized violent crime
- spontaneous societal violence, such as pogroms, uprisings, some riots, and everyday violent crime.

Our second typology dimension, conflict intensity, is based on total battle deaths. We define four levels of violence: minimum violence, which includes events involving 0 to 25 deaths per

year; low-intensity conflict, which includes 25–999 deaths per year; medium-intensity, which includes 1,000 to 100,000 deaths per year; and high-intensity, which includes more than 100,000 battle deaths per year. Battle deaths are an imperfect measure of conflict intensity because they capture only one small piece of the cost of a conflict, namely the direct effect of a conflict in terminating individual life. For example, conflict may cause famine or disease that wipes out hundreds of thousands of lives or economic devastation that leads to widespread poverty, but neither of these costs will be included if intensity is only based on battle deaths. Furthermore, battle deaths can be difficult to count, as it is not always clear who is a combatant. There are some alternative measures of intensity being developed to address these shortcomings. Some use indexes to rate the level of violence, others look at economic costs, or disability-adjusted life years. Because most data sets still rely on battle deaths or "conflict-related deaths," we use this measure for the current report, although we recognize its shortcomings.

To provide some context, Vietnam, the most recent war in Iraq, and the conflict in Afghanistan would all be classified as medium-intensity interstate wars; the ongoing conflict in Sudan would be an example of a medium-intensity ethnic war; and the civil wars in Libya and Syria as low- to medium-intensity civil wars. The genocide in Rwanda is counted as high-intensity one-sided violence by our typology, but can also be counted as high-intensity ethnic violence. Finally, ongoing sectarian violence in Iraq since the end of U.S. involvement could be counted as medium-intensity societal conflict.

Our typology has a number of advantages over other definitions of conflict and approaches to the study of conflict. First, the typology disaggregates conflict along two fairly objective and usually discernible characteristics (actors and intensity), allowing us to bin individual conflicts more easily and map trends over time. Second, as already noted, we have constructed the typology and calibrated its intensity levels in a way that will allow us to move between data sets, observe and compare trends in violence according to several different definitions, and thus present a more robust picture of conflict trends. Finally, by taking a holistic view of conflict, it supports our general approach in this report.

The typology also has some limitations. First, there will be overlap among the typology's different categories. For example, the line between conflicts involving a state and a weak nonstate actor and one-sided violence may be a fine one in some instances. Certain types of conflict may fit into several different cells. For example, antigovernment protests may fall into the minimum-intensity category or they may include minimum-, low-, or high-intensity violence and may be organized or spontaneous depending on the situation. Second, some conflicts may include many types of political violence, defying an easy categorization. As a result, it will be useful to think of the typology as a guide with relatively porous borders rather than a framework with fixed internal boundaries. Finally, the conflict types and intensity thresholds defined in the typology may not always correspond to the exact conflict as defined in existing data sets. As we noted before, it may be especially hard to distinguish between organized and spontaneous

societal violence. Table 2.1 provides "best examples" for each type of conflict defined by the typology.

The typology can be used in several different ways. First, we can use it to describe trends in conflict, considering how the distribution of ongoing or new conflicts across the matrix changes over time. Second, we can use the typology to consider how different sorts of changes or shocks to the external system have affected the form and intensity of conflict in the past and might affect the form and intensity of conflict in the future. Finally, we can use the typology as a way to integrate and combine the many different data sets that exist for the study of conflict and to discuss and use these data sets (and their definitions of conflict) together in our analysis of conflict trends.

# Key Data Sets

To study trends in each of these different forms of armed conflict and to develop a robust understanding of these trends, we relied on a large number of major data sets on armed conflict. Table 2.2 lists these data sets, the years covered, types of conflict included, and the definition of conflict used by each. Several observations are relevant. First, coverage of interstate and intrastate violence is clearly more complete than coverage of nonstate and societal violence. Second, some data sets cover several different types of violence while others address only one form. When a data set covers several different types of violence, our ability to disaggregate the data along the boundaries of the typology will depend on how the data set reports and codes incidents of conflict. For example, although the Cross National Times Series (CNTS) Databank gives us insight into societal conflict such as riots, protests, and demonstrations, it does not provide fatality information or separate between spontaneous and organized events.

In Appendix A, we present all the data and analysis summarized in this chapter. We also describe relevant trends in each data set and then compare across data sets where there is overlap. We consistently found that while there are some differences in the levels of violent and nonviolent conflict reported in each data set (largely because of differences in definitions and coding of violent events and conflict), the overall trends for each type of violence in our typology are largely the same across databases. In this chapter, we focus on one authoritative data series per conflict or violence type. Appendix A reviews additional data sources.

**Table 2.2. Data Sets and Definitions** 

Data Set	Years	Types of Conflict	Thresholds for Inclusion*	
Correlates Of War (COW)	1816–2007 Interstate, intrastate, nonstate; extrasystemic		War must have 1,000 battle deaths in 12-month period, each side must mobilize at least 1,000 persor	
UCDP	1946–2015 Interstate, intrastate, nonstate; extrasystemic; one-sided state; internationalized intrastate**		"Armed conflict" requires 25 deaths per year; "major war" requires 1,000	
Political Instability Task Force (PITF)	1946–2015	Ethnic, revolutionary conflict; genopoliticide	Conflict must include 1,000 total battle deaths and at least one year with 100 battle deaths Genopoliticide: Violence must have elite sanction, endure over longer period, result in death of a substantial portion of a communal or political group	
Major Episodes of Political Violence (MEPV)	1946–2015	1946–2015 Interstate, wars of Violent episode must have at lea independence, intrastate (ethnic and civil)		
Global Terrorism Database (GTD)	1970–2015	Terrorism	Incidents must have political, religious, or social goal, communicate to an audience outside victims, violate International Humanitarian Law	
CNTS	1916–2015	Riots, protests, antigovernment demonstrations, strikes, revolution, guerilla war	Each event has specific definition, focused on the participants, motivation, and scope. Some are nonviolent, others are violent but there are no fatality thresholds.	
International Military Interventions	1946–2005	Military interventions  " the movement of regular troops or forces (airborne, seaborne, shelling, etc.) of one cour inside another, in the context of some political dispute"		
Militarized Interstate Disputes (MID)	1816–2010 Militarized disputes that fall short of war		Involve use or display of force, but have fewer than 1,000 battle deaths	
International Crisis Behavior (ICB)	1946–2013	Interstate crises, most falling short of war	Crises have three major characteristics:  "(1) there is a threat to one or more basic values (2) an awareness of finite time for response to the value threat (3) heightened probability of involvement in military hostilities,"	

NOTE: \*More detail and definitions for each conflict type according to each database are provided in subsequent chapters along with full citations. \*\* The UCDP One-Sided State Violence data set goes through 2014.

a See Chapter Three for more detail.

b Frederic S. Pearson and Robert A Baumann, *International Military Intervention, 1946–1988*, Ann Arbor, Mich.: University of Michigan, Inter-University Consortium for Political and Social Research, Data Collection No. 6035, 1993, p. 1.

<sup>&</sup>lt;sup>c</sup> Michael Brecher and Jonathan Wilkenfeld, *A Study of Crisis*, Ann Arbor, Mich.: University of Michigan Press, 1997.

## Scope and Implications of Measurement Error

While the data sets that we include in our review are relatively comprehensive, there are certain sources of measurement error that affect even the best of them and that will also have implications for the trends that we observe. Most significantly, while high-intensity and interstate conflicts are likely to be accurately recorded over the entire period we are considering, the same may not be true for low-intensity, intrastate, and nonstate conflicts and violence. Because most data sets rely on reporting and media coverage to count conflicts, smaller conflicts that attract less attention and such forms of violence as protests, riots, and demonstrations may be unintentionally excluded. This will be especially true in earlier decades, such as the 1940s and 1950s (the start of our window of observation), when media coverage was less consistent than it has been since 1990, particularly in developing countries. Even now, it is likely that certain instances of low-intensity violence in remote locations or authoritarian regimes go unreported or are underreported.

Improvement in the quality and frequency of reporting, therefore, may lead to an apparent increase in the number of conflicts reported even if their true incidence has remained the same or even decreased. This systematic bias could contribute incorrect inferences about recent trends and future directions of certain forms of violence if it is not properly included in any analysis of trends. We ultimately cannot entirely correct for this bias, but we will consider its implications for our assessment of recent trends and future directions of certain types of conflict.

#### What Is Excluded from the Review?

Although we have attempted to build a typology and collection of data sets that includes as many forms of armed conflict and political violence as possible, there are still certain types of violence that are excluded, primarily because there are insufficient data to reliably map trends over time. Important among these excluded categories will be drug-, gang-, and crime-related violence, forms of "conflict" that are particularly severe in Central American, Caribbean, and some African countries. In recent years, this type of criminal violence has been responsible for as many fatalities as more organized forms of conflict elsewhere. In fact, homicide rates in a handful of Central and South American and Sub-Saharan African states reached rates as high as 80 per 100,000 individuals in 2013. For states with a population of 100 million or greater, this homicide rate would produce fatalities at the "high-intensity" level according to our typology. <sup>2</sup>

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<sup>&</sup>lt;sup>1</sup> United Nations Office on Drugs and Crime, *Global Study on Homicide 2013: Trends, Contexts, Data*, Vienna: United Nations, 2014.

<sup>&</sup>lt;sup>2</sup> For more on transnational criminal networks and associated violence see: Phil Williams, "Transnation al Criminal Organisations and International Security," *Survival*, Vol. 36, No. 1, 1994, pp. 96–113; Phil Williams, "Transnational Criminal Networks," in John Arquilla and David Ronfeldt, eds., *Networks and Netwars: The Future of Terror, Crime, and Militancy*, Santa Monica, Calif.: RAND Corporation, MR-1382-OSD, 2001, pp. 61–97; Fiona B. Adamson, "Globalisation, Transnational Political Mobilisation, and Networks of Violence," *Cambridge Review of International Affairs*, Vol. 18, No.1, 2005, pp. 31–49; and John Arquilla and David Ronfeldt, eds. *Networks and Netwars: The Future of Terror, Crime, and Militancy*, Santa Monica, Calif.: RAND Corporation, MR-1382-OSD, 2001.

Certain data sources can give us a window into this type of violence—revealing, for instance, that it is often linked with drug and human trafficking, criminal gangs, and sexual assaults, and that it appears to be increasing in many of the areas where it is most problematic. However, in general, we simply do not have the types of data sets needed to analyze criminal-, drug-, and gang-related violence in more detail. A brief summary of data sources that do exist and their limitations will make this point more clearly.

Probably the best source of data on criminal violence, including that related to drug trafficking and gang warfare, is the United Nations Office of Drugs and Crime (UNODC). The UNODC data include information on homicide, sexual assault, and other violent crime. However, these data are limited and unreliable in several ways. First, they cover a limited set of countries and years, preventing a time series analysis of international trends. Second, they rely on one of two sources of information, self-reports or victimization surveys, neither of which is completely trustworthy. Most of this information comes from country self-reports and so reveals only what the individual reporting country chooses to submit and/or is capable of reporting. This makes it unlikely that the data are complete and accurate. In addition to the UNODC, the World Health Organization (WHO) uses these data when tracking fatalities because of "violent causes," making its fatality data similarly insufficient for our analyses. Additionally, data for some countries are collected from "victimization" surveys, which ask individuals to report whether they or someone they know have been victims of certain crimes. However, this method assumes that individuals will accurately report their experiences, is subject to sampling concerns, and exists only for certain countries (mostly European countries where rates of crime and violence are lower than elsewhere). There is more detailed material on specific issues and specific countries, such as poppy cultivation in Afghanistan, human trafficking in Sub-Saharan Africa, or drug seizures in Central and South America. However, these data are still insufficient for the description or analysis of broader global trends, which is the main focus of this report.

Since we cannot provide a complete and systematic treatment of crime-, drug-, and gang-related violence, we emphasize that societal violence of this type is still a significant source of destabilization, death, and destruction that should be taken into account when considering or assessing the total aggregate amount of violence and conflict in the international system. While it is not always captured by existing data sets, it does figure prominently in the typology and may be an area for future study and analysis.

Another source of conflict that is not captured in our review or in existing data sets is cyberconflict. However, as cyberwarfare becomes an increasing national security concern, conflict researchers are going to have to find a way to measure the global level of cyberconflict in order to assess the level of stability in the international system. In fact, some researchers argue the majority of future conflict will be carried out in the cyber realm. This is an extreme view, but highlights the growing importance of this form of conflict and the fact that cyberattacks and warfare eventually will need to be incorporated into studies of conflict trends. This will mean not

only qualitative description of cyberattacks but also the development of cyberconflict data sets that can measure trends more quantitatively.<sup>3</sup>

# Trends in Interstate Violence

Trends in interstate violence suggest a significant decrease in the incidence and intensity of armed conflict. This result is true regardless of the database we consider, and appears to apply to violence at all intensities. The trend for disputes and crises that fall short of major war is somewhat more ambiguous. For these events, the downward trend is less definitive, but there is little evidence of any upward trend, especially when we focus on events that involve violence.

#### Armed Conflict

Our study of interstate conflict used three key data sets, the COW, MEPV, and UCDP. As highlighted in Table 2.2, each uses a slightly different threshold in its definition of conflict and each captures slightly different information on the conflicts included in the database, but all followed similar trends. In this section, we describe trends in interstate violence using the MEPV data set, which is also used for the baseline projections in Chapter Four.

The MEPV uses a ten-point index to classify conflicts according to their total associated fatalities (including civilian deaths) but includes only those incidents with at least 500 battle-related deaths over the course of the conflict. If there are several ongoing conflicts within a country in a given year, then the total "score" received for that country-year will equal the sum of the intensity scores assigned to each episode. Compared with the other data sets that measure interstate conflict, the MEPV applies a slightly more comprehensive definition of *conflict* and thus reports a slightly higher number of conflicts than other data sets. For example, the MEPV set for interstate violence includes such events as the September 11, 2001, al Qaeda attacks, the Bay of Pigs crisis, border disputes between Honduras and Nicaragua, clashes in India and Pakistan, and the Israeli-Hezbollah conflict, none of which are counted in the other data sets. This difference has several implications. On the one hand, the MEPV data give us a much more complete picture of the total amount of interstate violence in the system at any given time. On the other hand, the MEPV approach may overestimate the amount of violence associated with interstate *war* because it also includes other forms of interstate violence.

For our analysis, we have roughly translated this coding scheme into our three levels of intensity and counted the number of conflicts of each type at each level of intensity ongoing in

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<sup>&</sup>lt;sup>3</sup> Jason Andress and Steve Winterfeld, *Cyber Warfare: Techniques, Tactics and Tools for Security Practitioners*, Waltham, Mass.: Syngress, 2011; Kenneth Knapp and William Boulton, "Ten Information Warfare Trends," in Lech Janczewski and Andrew M. Colarik, eds., *Cyber Warfare and Cyber Terrorism*, Hershey, Pa.: IGI Global, 2007, pp. 17–25.

<sup>&</sup>lt;sup>4</sup> Monty G. Marshall, *Major Episodes of Political Violence (MEPV) and Conflict Regions 1946*–2008, Center for Systemic Peace, 2010; Monty G. Marshall, *Major Episodes of Political Violence (MEPV) and Conflict Regions 1946*–2012, Center for Systemic Peace, 2013.

each year. Figure 2.1 shows the total number of interstate conflicts coded by the MEPV data set while Figure 2.2 shows the number of conflicts by intensity. As we have noted, the wars in Vietnam (1964–1973), Iraq (2003–2010), and Afghanistan (2001–2012) are all counted as medium-intensity interstate violence according to the data set we used. As alluded to several times, interstate conflict has followed a clear downward trend since its peak in the late 1970s and early 1980s. Interstate conflict at all intensity levels has declined significantly since the end of the Cold War. It has reached levels consistently near zero in recent years, but it has not disappeared, with several conflicts remaining. Figure 2.2 shows that high-intensity interstate violence has been extremely infrequent since World War II, while low- and medium-intensity interstate violence has tended to decline over time. Medium-intensity violence was most significant in the 1980s but fell sharply in the 1990s, while low-intensity interstate violence was most significant in the 1960s and late 1970s, plateaued at a lower level in the 1980s, and then declined in the 1990s. As of 2015, MEPV codes no remaining ongoing interstate conflicts. However, trends for all three levels of violence also suggest that even as it has been virtually eliminated, interstate violence may still have the potential to bubble up periodically.

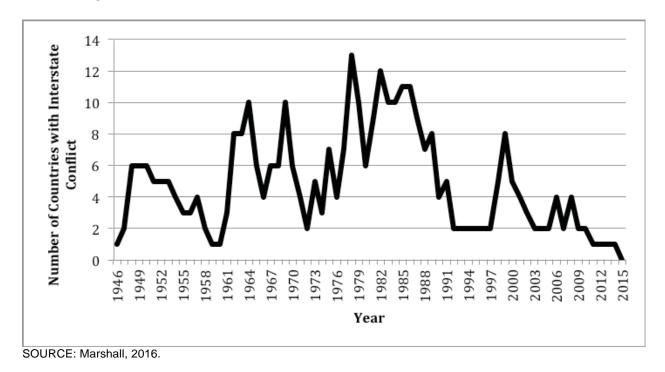


Figure 2.1. Number of Countries with Interstate Conflict, MEPV Data, 1946 -2015

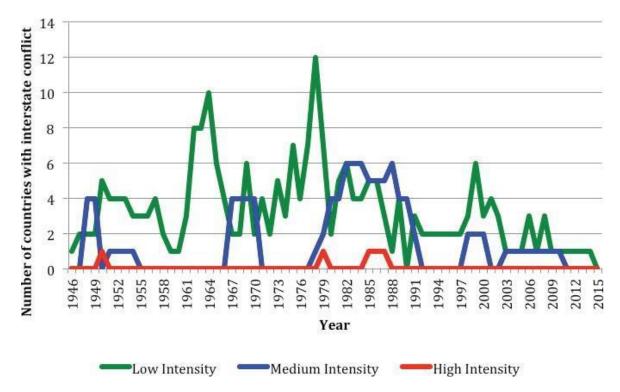


Figure 2.2. Countries with Interstate Conflict, By Intensity, MEPV Data, 1946 -2015

SOURCE: Marshall, 2016.

## Crises and Militarized Disputes

Not all interstate uses of military force escalate to armed conflict or war. Some involve only a show of force or an exchange of threats. For example, militarized disputes are common between Pakistan and India, where border disagreements or political discord can lead to troop mobilization and sometimes border skirmishes. Data sets that capture these types of disputes are useful supplements for a study of conflict trends because they capture a type of low-intensity violence that might otherwise be excluded. They are also useful for the perspective they provide on the types of disputes and crises that do escalate to major armed conflict and those that can be effectively de-escalated and controlled.

Trends in militarized disputes and interstate crises show that, just like interstate war, the incidence and intensity of these conflict events have fallen significantly since their peak and since the end of the Cold War. However, this decline has been nowhere near as sharp or consistent as that observed for more intense forms of armed conflict. Some of the decline in armed conflict observed in recent years may result from better crisis mediation processes (including mediation by international organizations) that limit conflict escalation before the outbreak of major hostilities, but that make crises and militarized disputes somewhat more likely.

We use two primary sources of data on conflicts that fall short of war, the MID data set and the ICB database. Because the MID data are used more consistently in existing literature to

describe trends in interstate conflict and violence, we focus on this measure of international crises and disputes.<sup>5</sup> The data set defines a MID as a "united historical [case] of conflict in which the threat, display or use of military force short of war by one member state is explicitly directed toward the government, official representatives, official forces, property, or territory of another state." Because the MID data are part of the larger COW project, "short of war" means fewer than 1,000 battle-related fatalities. In the MID data, these disputes are coded according to their levels of violence or hostility: "no violence," "display of force," "use of force," or "war." Because MIDs by definition fall short of the 1,000-death threshold, they may fall into our "minimum" or "low-violence" categories. Importantly, there may be MID incidents that correspond with "armed conflicts" in the UCDP or PITF data because of the different ways each data set codes conflicts.

Figure 2.3 shows MID onsets from 1946 through 2010, the last date included in the MID data. It is important to note that while many of the figures in this report show cumulative numbers of conflicts, this particular one focuses on incident onset. Onsets of low-intensity MIDs have fallen since their peak in the 1980s at the end of the Cold War, but despite a number of temporary fluctuations, the number of low-intensity MIDs has remained at an overall stable level since the early 1990s. In contrast, minimum-violence MIDs have been at higher levels since 1990 than previously, reaching a peak in the early 2000s. Since 2006, the onset of these minimum-violence MIDs has fallen slightly. Notably, over the entire period and continuing today, low-intensity MIDs that do involve some violence appear more common than those with little or no violence. The trends in both types of MIDs suggest that militarized disputes have not disappeared, even as interstate war and more-intense conflict have fallen close to zero. This suggests two observations. First, the fact that these incidents do not escalate to full-scale war may stem from a combination of the effectiveness of existing dispute resolution and mediation procedures at the international level and the efficacy of deterrence, especially since much of the decrease in conflict occurred during a period of U.S. preeminence. Second, as long as disputes involving military forces continue, so will the risk of a flare-up into more-significant conflict, and even war.

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<sup>&</sup>lt;sup>5</sup> Daniel M. Jones, Stuart A Bremer, and J. David Singer, "Militarized Interstate Disputes, 1816–1992: Rationale, Coding Rules, and Empirical Patterns," *Conflict Management and Peace Science*, Vol. 15, No. 2, 1996, pp. 163–213.

<sup>&</sup>lt;sup>6</sup> Glenn Palmer, Vito D'Orazio, Michael Kenwick, and Matthew Lane, "The MID4 Data Set: Procedures, Coding Rules, and Description," *Conflict Management and Peace Science*, Vol. 32, No. 2, April 2015.

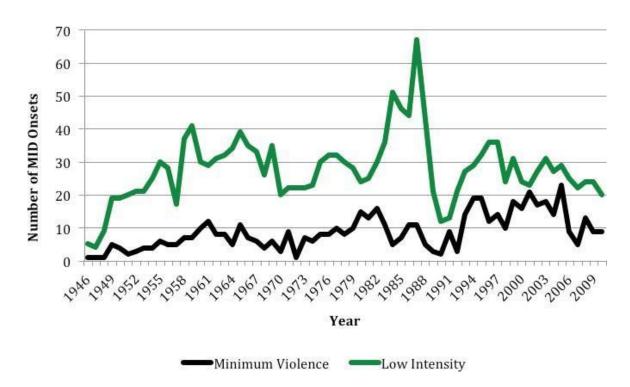


Figure 2.3. New Militarized Interstate Disputes, by Year of Onset, 1946-2010, by Level of Violence

SOURCE: Jones, Bremer, and Singer, 1996; Palmer et al., 2015.

#### Trends in Intrastate Violence

Intrastate conflict includes all forms of violence that occur within a state, ranging from war to riots and anti-government demonstrations. Because it encompasses so many different types of violence, intrastate conflict is measured by a large number of different data sets and incorporates many different trends. Aggregate trends in intrastate conflict appear to follow the same patterns observed for interstate violence, specifically a general decline in frequency of conflict and intensity of conflict since the end of the Cold War, although there has been an uptick in some types of intrastate armed conflict since 2012. This trend applies equally to civil and ethnic conflict, is most dramatic for high-intensity violence, and is once again consistent across data sets. However, trends in other forms of low to medium intrastate violence—particularly involving nonstate and societal actors, including riots, protests, demonstrations, and terrorism—show more limited evidence of this consistent downward trend and in some cases have trended upward in recent years.

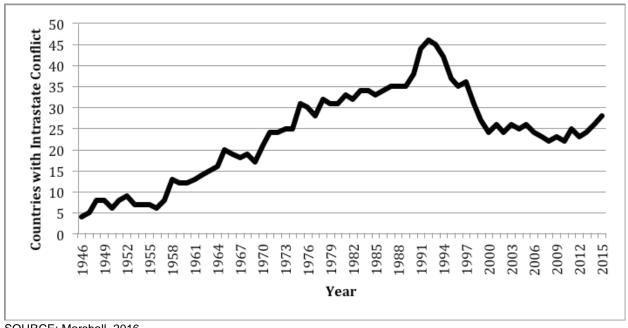
#### Armed Conflict

Our review of intrastate conflict relied on four major databases: UCDP, MEPV, COW, and PITF, which tracks the number of revolutionary and ethnic wars per year. Once again, we focus our discussion here on the MEPV data set and refer readers to Appendix A for additional detail.

Trends in intrastate conflict show a downward trend overall and at most levels of intensity, but this trend is more gradual and less complete than that for interstate conflict, leaving more conflict remaining within the system. Figure 2.4 shows the trend for total number of conflicts, and Figure 2.5 shows the number of conflicts by intensity level. Examples of ongoing intrastate violence include medium violence in Sudan (Darfur) and Pakistan (in the federally administered tribal areas) as well as low-intensity violence in Yemen and in Mexico (between the government and the drug cartels). The overall trend shows that the incidence of intrastate conflict increases steadily over the period from 1946 to about 1991, falls consistently until about 2001, appears to plateau until 2012, then rises slightly through 2015. Looking at violence by intensity, it seems that this recent uptick in conflict has been driven by low- and medium-intensity intrastate conflict, rather than high-intensity conflicts, notwithstanding the major conflict in Syria. Intrastate conflict incidence across intensities rises to a peak in the late 1980s and early 1990s, then declines. The decline in violence is steepest for higher-intensity conflicts and subtler at lower intensities. High-intensity intrastate conflicts have declined to very low levels since 2001. In contrast, medium-intensity intrastate conflicts plateaued through the late 1990s and 2000s, but have risen again since 2012. Finally, low-intensity intrastate conflict fell drastically throughout the 1990s, increased starting in 2000, fell again after 2005, and has been rising since 2012. This increase in low- and medium-intensity intrastate conflict is interesting and potentially significant as it diverges from the aggregate decrease observed for most other forms of conflict and suggests some persistence of low- and medium-intensity intrastate conflict, even as the other forms of conflict decrease. That said, a significant portion of remaining intrastate violence consists of long-running or repeated conflicts, rather than frequent outbreaks of brand new conflicts. However, new conflicts in places like Syria have also contributed to this increase. It is important to note that, even with recent increases, intrastate violence remains well below peak levels and well within the historic average.

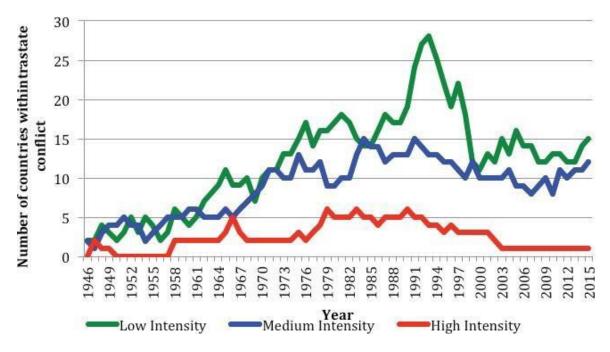
An important caveat on this trend is the potential bias introduced by measurement error, as discussed in the introduction. Specifically, reporting on low-intensity intrastate violence has almost certainly increased over the 1946–2015 period considered here. This improved reporting could increase the number of conflicts included in conflict data sets, even if the actual number of conflicts has not increased or has even fallen, and will affect all data sets. Since we cannot fully separate the trend we observe in violence and this measurement error, we will need to be somewhat cautious when basing inferences off of observed trends.

Figure 2.4. Number of Countries with Ongoing Intrastate Wars, MEPV, 1946–2015



SOURCE: Marshall, 2016.

Figure 2.5. Number of Countries with Ongoing Intrastate Wars, by Intensity, MEPV, 1946 –2015



SOURCE: Marshall, 2016.

#### Ethnic and Civil Conflicts

The general trend reported for intrastate conflict appears to apply to both civil or revolutionary conflicts (with a political motivation) and ethnic conflicts (with an ethnic or identity group basis). Importantly, although ethnic conflict has been more common than civil conflict, the two types of conflict appear to have followed similar trends when considered in the aggregate (Figure 2.6). Both ethnic and civil conflict rose to a peak in the late 1970s and 1980s, before falling in the mid-1990s. This decline continued through about 2008, and since that time both ethnic and civil conflict appear to have increased slightly. These trends indicate that both civil and ethnic conflict contribute to the recent uptick in intrastate violence discussed above.

Figures 2.7 and 2.8 show the total number of civil and ethnic conflicts recorded by the MEPV data set from 1946 to 2015 by intensity of conflict. The conflict in Libya is counted as a low-intensity civil conflict, while that in Syria is an example of a medium-intensity ethnic war within the MEPV data set.<sup>7</sup>

Figure 2.7 shows civil violence by intensity level. Low-intensity civil violence has been most common over most of the period under consideration, with the exception of a surge in medium intensity civil violence in the mid-1980s. Low-intensity civil violence reached a peak in the 1970s before declining. In recent years, high-intensity civil conflict appears to have been substantially reduced, but there has been an increase in low- and medium-intensity violence.

Figure 2.8 shows trends for ethnic conflict by intensity. Ethnic conflict at high intensities has been virtually eliminated, falling consistently since the 1980s. In contrast, levels of ethnic conflict at low and medium intensities do not follow the downward trend evidenced in most other forms of violence. Medium-intensity ethnic conflict reached a peak in the 1980s and has remained at this level since then, with some fluctuations. Low-intensity ethnic conflict, which has been the most prevalent form of ethnic conflict since 1970, reached a peak in the early 1990s and fell sharply until about 2002 and then began to rise again after 2004. These trends suggest that low- and medium-intensity ethnic violence present a continued security concern and may do so for the foreseeable future. Notably, the caveat about possible bias introduced by advances in the scope and quality of reporting should be taken into account in our interpretation of these trends.

<sup>&</sup>lt;sup>7</sup> It is worth noting that in other data sets, such as the UCDP data set, Syria would be considered a high-intensity civil war.

Figure 2.6. Number of Countries with Ongoing Civil and Ethnic Wars, MEPV, 1946 –2015

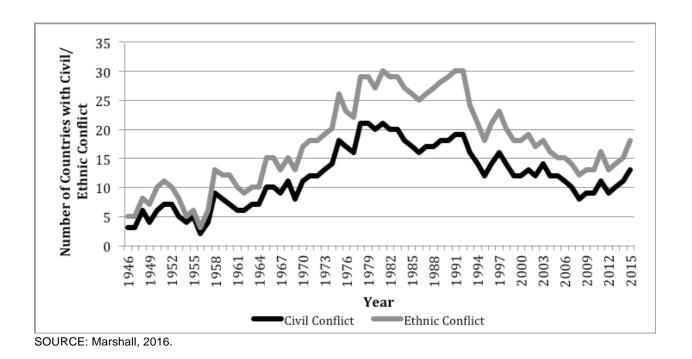
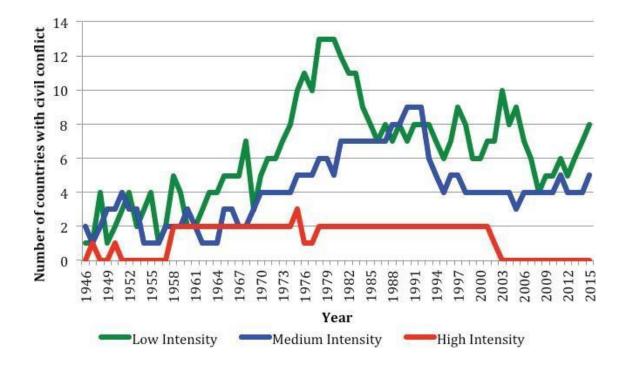
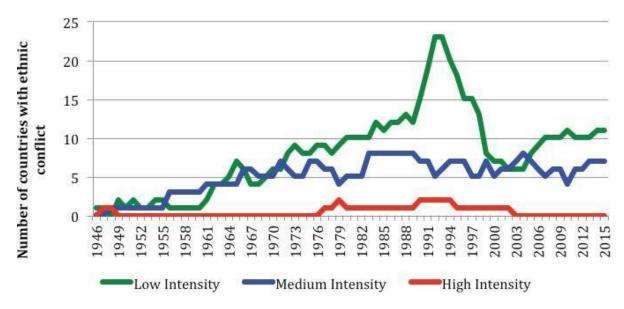


Figure 2.7. Number of Conflicts with Ongoing Civil/Revolutionary Wars, by Intensity, MEPV, 1946 –2015



SOURCE: Marshall, 2016.

Figure 2.8. Number of Countries with Ongoing Ethnic Conflict, by Intensity, MEPV, 1946 –2008



SOURCE: Marshall, 2010.

#### Intrastate Violence That Falls Short of War

Intrastate violence may also come in forms that fall short of armed conflict or that do not involve the use of violence—for example, protests, riots, demonstrations, and strikes. These events may be significant for many reasons, including the fact that they can lead to additional violence and sometimes escalate into civil or ethnic wars. Furthermore, if intrastate violence causes instability in a country or a region that has implications for demands on U.S. Army forces, this could be just as important as armed conflict.

The CNTS Databank is our primary source of information on these events. It includes information on a number of different types of societal violence, including assassinations, protests, riots, demonstrations, strikes, and purges over the period 1919–2015. The data set has some limitations: It does not include information on fatalities (and thus cannot be precisely disaggregated by intensity) and it does not separate organized societal violence from spontaneous violence. This is an important distinction when considering overall trends. In some cases, it is possible to infer the intensity or spontaneity of an event from the definition or type of violence, but this may not be true in all cases. For example, most assassinations have relatively low death counts and are planned. Peaceful demonstrations would also have minimum violence levels, but may be organized or spontaneous. Riots are most likely to be low intensity and are often unplanned, but purges may involve death rates at medium intensity or even higher. The quality

<sup>8</sup> CNTS Data Archive, homepage, 2016.

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of the CNTS data is also affected by reporting and media coverage. Events such as protests and demonstrations might not always be covered by local or national media, especially in developing countries and especially in the early decades of our analysis. As for previous analyses, improved reporting may lead to an apparent increase in number of these types of incidents over time, even if the true global incidence is the same.

Each event type collected in the CNTS data has its own trajectory and trend over the period under consideration. However, one notable similarity shared by each event type is the fact that, with the exception of revolutions, they don't clearly follow the same downward trend observed for most types of intrastate conflict over this same period. Instead, there is considerable fluctuation in all types of events from 1946 through today, with several (including antigovernment demonstrations, guerilla warfare, and riots) becoming more frequent in recent years, driven by events in the Middle East and elsewhere. This suggests that while there has been a general decline in more significant forms of conflict, low-level political violence remains a more serious concern, particularly in specific regions and countries. A brief summary of some of the more specific trends may offer insight into the drivers of these types of violence. Readers will note that we do not include all CNTS variables in this discussion, only a few of particular interest.

Assassinations are likely to be planned events and to have a small number of fatalities, probably falling in the minimum-violence or low-intensity categories of our typology. Figure 2.9 shows that assassinations became increasingly frequent after 1970, reaching peaks in the late 1970s and early 1990s before declining. The number of assassinations increased between 2000 and 2005, but fell between 2005 and 2009 before rising again. Some of the peaks can be explained in the context of ongoing events, including long-simmering terror campaigns, political instability, or insurgencies. For instance, the peaks in assassinations in the 1970s and 1980s were driven by violence in such countries as Guatemala, Argentina, El Salvador, Turkey, and Spain. The smaller peak in 2004 is driven almost entirely by violence in Colombia. Although the total number of assassinations per year has fallen since its peak, this trend has consistently sloped upward since 2009, with the exception of a slight drop in 2015. This increase has been driven by an increase in assassinations in a number of countries, including Somalia, Syria, Turkey, Afghanistan, and Colombia. Assassinations may be a particularly important measure of low-level intrastate conflict because they may be associated with the crime-, gang-, and drug-related violence that remain highly pervasive and damaging but difficult to measure in many regions. Locations and time periods with high criminal violence may also have high rates of assassination, sometimes executed by similar groups of people.

Figure 2.9. Assassinations, CNTS, 1919-2015

SOURCE: CNTS Data Archive, 2015.

NOTE: The CNTS data set does not include data for the years 1939–1946. We have chosen to present a continuous line, but have not included the omitted years on the x-axis.

•Assassinations

Trends in nonviolent antigovernment demonstrations (the full series is shown in Figure 2.10; Figure 2.11 truncates the number of instances shown on the graph to provide a better sense of the variation in instances at lower levels) show a somewhat volatile trend, with a gradual increase from the early 1970s through about 1993 and then a gradual decrease until 2010, when the Arab Spring led to a dramatic increase. The slow increase during the 1970s and 1980s may have been driven by a number of causes, including growing unrest in Soviet-bloc countries (such as Poland), as well as events in Southeast Asia and in countries such as South Korea and the Philippines, whereas more-recent increases have been driven largely by the Arab Spring and subsequent unrest in the Middle East, as well as by unrelated turmoil in Southeast Asia, Africa, and Latin America. However, as noted elsewhere, some of the apparent increase in the number of demonstations is likely due to underreporting of these demonstrations in past years because of general trends in media coverage of conflict and the underlying sources upon which CNTS relies. Future trends in this form of nonviolent conflict may depend partly on political events in the Middle East, Africa, and elsewhere—and more specifically, on whether political unrest observed over the past several years continues or abates.

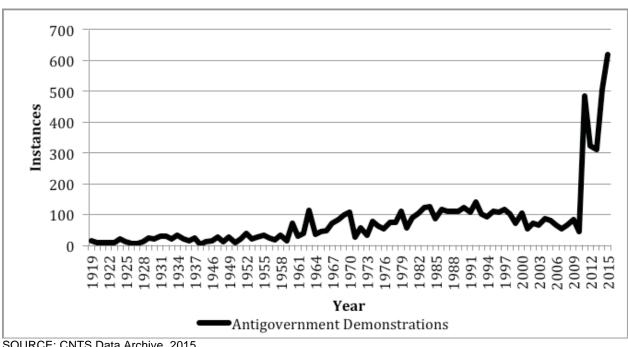
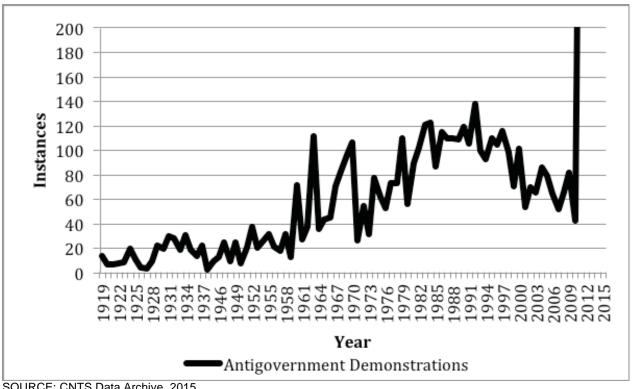


Figure 2.10. New Antigovernment Demonstrations by Year of Onset, CNTS, Full Series

SOURCE: CNTS Data Archive, 2015.

NOTE: The CNTS data set does not include data for the years 1939-1946. We have chosen to present a continuous line, but have not included the omitted years on the x-axis.

Figure 2.11. New Antigovernment Demonstrations by Year of Onset, CNTS, Truncated Series



SOURCE: CNTS Data Archive, 2015.

NOTE: The CNTS data set does not include data for the years 1939-1946. We have chosen to present a continuous line, but have not included the omitted years on the x-axis.

As defined in the CNTS data set, guerilla warfare (Figures 2.12, and 2.13) includes "any armed activity, sabotage, or bombings carried on by independent bands of citizens or irregular forces and aimed at the overthrow of the present regime." This type of violence may involve conflict between two nonstate groups or a nonstate group and a state, even qualifying as "armed conflict" at sufficiently high levels. In our typology, this type of violence is likely to be organized and to be categorized as low-intensity violence. Figure 2.12 shows the full trend in guerilla war (again, we use the CNTS definition) while Figure 2.13 provides a close-up of the same trend line at points well below its sharp 1970 peak. The rate of guerilla warfare has been relatively stable except for the sharp peak around 1970, driven almost entirely by the Vietnam War, events in Southeast Asia (Cambodia, Laos), and possible measurement error. Outside of this spike, there is some evidence of a slight increase from about 1940 to 1969 and then a slight decrease from about 1989 to 2009. There has also been a sharp upward trend in instances of guerilla warfare in recent years. This trend is driven in part by an increase in the number of countries experiencing at least one incident classified as guerilla warfare according to the CNTS

<sup>9</sup> CNTS Data Archive, 2015.

definition, but also by a number of countries that have a particularly large number of events in recent years. These countries include Syria, Egypt, Afghanistan, Turkey, Nigeria, and Sudan, among others. This suggests both a spread in scope and a change in frequency or intensity in certain specific locations. Guerilla warfare does seem to be one of the few forms of violence that is enduring and increasing even as other types of conflict begin to disappear, although (as noted elsewhere) the recent increase may be the result of trends in media coverage and awareness of these types of incidents.

Our review of various types of intrastate conflict that fall short of war suggests that unlike more intense forms of intrastate violence, these lower-intensity and nonviolent events do not seem to follow an unambiguous downward trend. Instead, while several have declined since their peak, these trends appear to fluctuate much more over time and in recent years seem to be increasing in frequency—as well as scope, in some cases. These forms of conflict may continue to be relevant security concerns, especially when they escalate or trigger instability elsewhere.

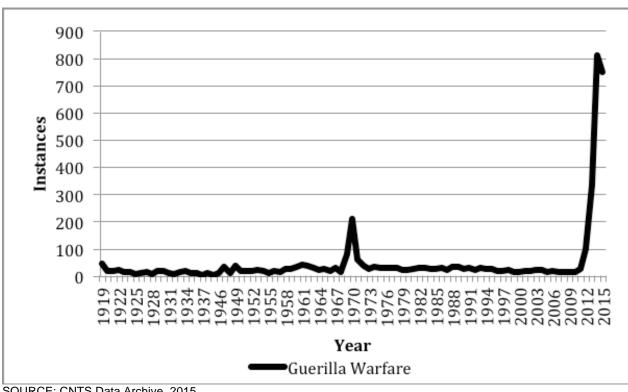


Figure 2.12. Guerilla Warfare, CNTS, 1919-2015

SOURCE: CNTS Data Archive, 2015.

NOTE: The CNTS data set does not include data for the years 1939-1946. We present a continuous line, but have not included the omitted years on the x-axis.

Figure 2.13. Guerilla Warfare, Close-Up, CNTS, 1919-2015

SOURCE: CNTS Data Archive, 2015.

NOTE: The CNTS data set does not include data for the years 1939–1946. We present a continuous line, but have not included the omitted years on the x-axis.

#### One-Sided State Violence

In addition to fighting against rival groups as one of two or more actors in a conflict, states also use violence unilaterally against civilian populations. One-sided state violence can range in intensity from isolated assassinations to larger campaigns of genocide or politicide (systematic destruction of a political entity and its members). Because it does often include only one actor, one-sided state violence may be excluded from standard conflict data sets (the MEPV is a noted exception). Both the UCDP and PITF data sets code one-sided state violence in separate databases. We focus on the PITF data on genocide and politicide because they cover a longer period. Appendix A provides details on the specific trends in one-sided state violence in other databases. As is the case for our other analyses, the data sets differ in what they measure but are similar in the trends that they report.

As with aggregate levels of interstate and intrastate conflict, one-sided state violence is becoming less frequent—and less severe when it does happen. It has not disappeared, however. The PITF codes incidents of genopoliticide over the period 1948–2015, rating intensity on a five-

point scale based on the number of fatalities. But in this case, fatalities are not strictly "battle deaths," they include the deaths of civilians targeted by the mass violence. As a result, we may see more genopoliticides at high-intensity levels than was observed for other forms of conflict. Genopoliticides are defined as involving "promotion, execution, and/or implied consent of sustained policies by governing elites or their agents—or in the case of civil war, either of the contending authorities—that result in the deaths of a substantial portion of a communal group or politicized noncommunal group." In genocides, the victimized groups are identified by their ethnic and religious characteristics. In politicides, targeted groups are identified by political affiliation or opposition group. Authorities are complicit in the killing associated with genopoliticide and the incident is likely to endure over a longer period of time. <sup>10</sup>

According to the PITF data, the majority of genopoliticide events occurred between the mid-1960s and mid-1990s and fall into the medium intensity violence category (see Figure 2.14). As noted above, violence in Rwanda in 1994 is coded as high-intensity genopoliticide. Other recent instances include Sri Lanka (government versus Tamil), where violence is classified as medium intensity; Sudan, where the violence began at high intensity and then lessened; Angola, also medium intensity, and Kosovo, with low intensity. Medium-intensity genopoliticide rises consistently in frequency over the period from 1955 to 1975, reaching a peak between 1975 and 1980 before falling throughout much of the 1980s. There is another spike in the number of these violent episodes around 1990, after which point genopoliticide becomes increasingly infrequent—but, importantly, not nonexistent. Low-intensity genopoliticide appears to have been most common in the mid- to late 1980s and early 1990s, while high-intensity conflict is generally infrequent over the entire period. Since the early 2000s, genopoliticide has been infrequent and occurred mostly at medium intensity. Both intensity levels of genopoliticide reached a low point in 2012 but have risen slightly since then. International norms against state violence and the greater willingness of third parties to intervene if evidence of genopoliticide emerges may explain both the reduction in frequency and intensity since 2000. Another explanation is the spread of democracy, which also tends to limit attacks of this type by the state on nonstate groups and civilian populations.

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<sup>&</sup>lt;sup>10</sup> Monty G. Marshall, Ted Robert Gurr, and Barbara Harff, *PITF State Failure Problem Set*, Data set and Coding Guidelines, 2012.

Figure 2.14. Number of Countries with Genopoliticide, by Intensity, PITF, 1955 -2015

SOURCE: Marshall, Gurr, and Harff, 2016.

# Violence by Nonstate Actors

#### Armed Conflict

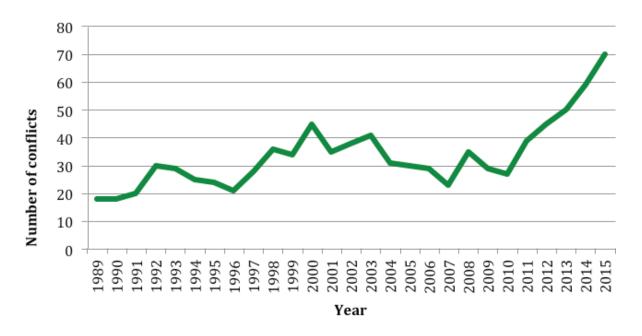
Studying conflict that involves nonstate actors exclusively is complicated by the fact that while some data sets include these conflicts along with those involving states as a form of civil or ethnic war, others separate out those conflicts that involve only nonstate participants. Furthermore, armed conflict between nonstate actors can fall across the boundary between interstate and intrastate conflict, depending on the identity of the groups and the location of the conflict (and thus may span categories in our typology). The PITF and MEPV data sets include violence involving only nonstate groups in their databases, but do not identify this violence with an independent code, so we cannot assess its level or trend apart from the aggregate data. The UCDP and COW data sets also record nonstate conflict, but do so in separate databases. Trends in both data sets suggest a persistent level of nonstate violence in recent years and suggest that armed conflict between nonstate groups will continue to be relevant to conflict in the future. Although the UCDP data set covers only 1989–2014, which is a much shorter time period than the COW data set (1816-2007), the UCDP data are more current and the coding of nonstate wars more consistent and comprehensive. As a result, we focus our analysis on the UCDP data for our discussion of nonstate conflict and refer readers to Appendix A for additional details.

The UCDP nonstate conflict data set includes "communal and armed conflict between two organized groups, neither of which is the government of a state, which results in at least 25 battle deaths in a year." Figures 2.15 and 2.16 show trends in low- and medium-intensity nonstate conflict, where the majority of nonstate violence falls. Medium-intensity nonstate conflict has been relatively episodic and infrequent. In contrast, low-intensity violence has occurred more frequently and has shown significant variation over the period under consideration. Lowintensity nonstate conflict reached peaks in the early and late 1990s, before falling consistently between 1999 and 2007. However, recent years (since 2009) reveal another significant increase in this type of violence, with the number of ongoing low-intensity nonstate actor conflicts more than doubling since 2010. This increase represents a diffusion of nonstate actor conflict and an increase in the number of specific instances of nonstate actor conflict in certain countries, including Somalia, Kenya, Mexico, Sudan, Syria, and Nigeria, as well as a proliferation of conflicts involving ISIS. Neither medium- nor low-intensity nonstate conflict appears to be decreasing according to the UCDP data, suggesting possible persistence in conflict at the nonstate or societal level even as conflicts involving state actors begin to decline. Importantly, because of its reduced time frame, this trend line is unlikely to be affected by measurement error in the same way that other data on low-intensity conflict might be.

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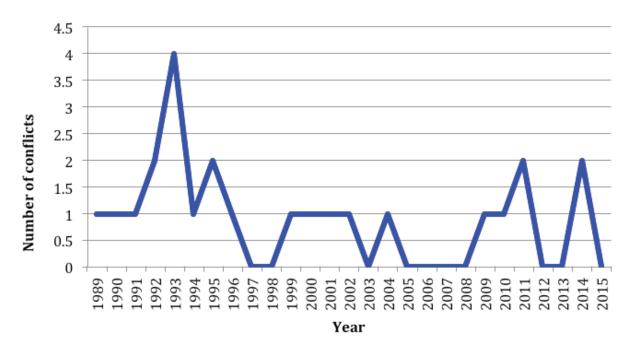
<sup>&</sup>lt;sup>11</sup> Ralph Sundberg, Kristine Eck, and Joakim Kreutz, "Introducing the UCDP Non -State Conflict Data set," *Journal of Peace Research*, Vol. 49, No. 2, 2012, pp. 351–362. Also see Uppsala Conflict Data Project, *Armed Conflict Data set Codebook*, 4-2012, Centre for the Study of Civil Wars, International Peace Research Institute, Oslo (PRIO), 2012.

Figure 2.15. Ongoing Nonstate Conflicts, Low Intensity, UCDP, 1989–2014



SOURCE: Sundberg, Eck, and Kreutz, 2012; UCDP Non-State Conflict Dataset v. 2.5-2015, 1989-2014.

Figure 2.16. Ongoing Nonstate Conflicts, Medium Intensity, UCDP, 1989–2015



SOURCE: Sundberg, Eck, and Kreutz, 2012; UCDP Non-State Conflict Dataset v. 2.5-2015, 1989-2014.

#### **Terrorism**

Terrorism is another form of violence also perpetrated largely by nonstate actors. (Although there is state-sponsored terrorism, we do not explicitly consider that type of violence in this subsection.) Terrorism can be interstate, transnational, or intrastate (also known as domestic). The intensity of a terrorist attack can range from low (and even no fatalities) to medium, according to our typology. Although terrorism is similar to other forms of political violence in many ways, it has a number of unique characteristics. The GTD, one of the major databases of terrorist events, covers domestic and transnational terrorism since 1970. It defines terrorism as an "intentional act of violence or threat of violence by a nonstate actor." It also requires that the incident meet two of the following three criteria:

(1) The violent act was aimed at attaining a political, economic, religious, or social goal; (2) The violent act included evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) other than the immediate victims; and (3) The violent act was outside the precepts of International Humanitarian Law.<sup>12</sup>

This final requirement essentially means that the violence will target civilians, rather than combatants. Attacks are coded by the number of fatalities, their location, target, tactic, and (where possible) the perpetrating group.

Like other forms of nonstate conflict, terrorist attacks do not seem to be following the general downward trend observed for more-traditional forms of armed conflict. An analysis of the GTD data reveals a number of key observations. First, the majority of terror attacks actually cause no deaths. Although this may seem counterintuitive, terrorists often use violence to call attention to themselves or their cause, and would rather have lots of people watching the attack than lots of people killed by the attack. Those that do cause deaths typically remain in the low-intensity category, simply because few terror attacks cause the 1,000 deaths needed to make it to the "medium" intensity level of violence (although the total deaths from a terrorist campaign may reach this level easily). Figures 2.17 through 2.19 show the number of terror attacks for each level of intensity. Figure 2.17 identifies the four attacks since 1970 that have had more than 1,000 deaths. These include a 1994 attack on Rwandan Tutsi refugees by Hutus; the 9/11 attacks in New York City; and a 2014 ISIS-claimed abduction of more than 1,500 Iraqi soldiers, the majority of whom were later killed. It is worth noting that there are a number of problems with the GTD data set, largely in the way events are collected and coded. First, the data set has changed hands many times, and this has reduced the consistency with which coding rules are applied over time. Second, the sources included in the data set change often, meaning that a perceived spike in the number of attacks could instead reflect access to a new data source. Third, the data set has recently included attacks on soldiers during the course of a war by militant

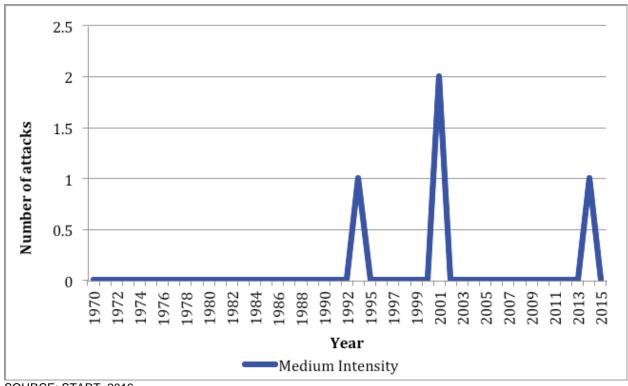
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<sup>&</sup>lt;sup>12</sup> National Consortium for the Study of Terrorism and Responses to Terrorism (STAR T), *Global Terrorism Database Codebook*, October 2012.

groups as terrorism. In most conceptions of terrorism, these attacks would be considered part of the ongoing war and not as terrorism. In fact, the 2014 ISIS abduction and killing of Iraqi soldiers noted above would fall into this category—ISIS and Iraq are at war and the attack was conducted as part of this continuing conflict. The inclusion of this and similar attacks in the GTD may artificially inflate the number of terrorist attacks reported in any given year.

Figure 2.18 shows that low-intensity terror attacks increased sharply in the late 1970s before falling in the mid-1980s and rising again in the 1990s. The number of low-intensity attacks also has increased since 2001, declining slightly between 2009 and 2012 before rising exponentially in 2013 and 2014, with only a small decline in 2015. Minimum-violence attacks have also risen dramatically since 2007, after a decline that began in the early 1990s (Figure 2.19). The increases in the trend lines for low-intensity and minimum-violence terrorist attacks are driven by a number of factors. First, there has been a real increase in these types of attacks in places like Iraq, Syria, and Somalia. Second, as noted above, the criteria that the GTD has used to identify terrorist incidents have also changed over time and now include certain types of attacks that had formerly been excluded. Notably, many actions that would previously have been considered part of an armed conflict in places such as Iraq are now being classified as terrorist attacks. Finally, as also noted above, the sources included in GTD's analysis also change over time. As the project has progressed, researchers have gained access to new sources that have provided better data and have allowed researchers to identify a greater number of attacks. At the same time, media attention to terrorist attacks has increased following the 9/11 attacks. However, while some of the observed increase may be due to reporting and definition issues, low-intensity and minimum-violence terror attacks appear to have become more common, even as other types of conflict have become more infrequent. Trends in terror attacks that do not cause fatalities or that cause very few fatalities remain relevant because even if they cause no death, they can still contribute to instability, retaliation, future conflict, and escalation of ongoing conflicts. In addition, the sheer number of these attacks and the uncertainty that they cause for military and political actors reinforce their continued relevance.

Figure 2.17. Number of Terror Attacks, Medium Intensity (Greater Than 1,000 Deaths), GTD, 1970 – 2015



SOURCE: START, 2016.

Figure 2.18. Number of Terror Attacks, Low Intensity (Deaths Between 25 and 1,000), GTD, 1970 – 2015

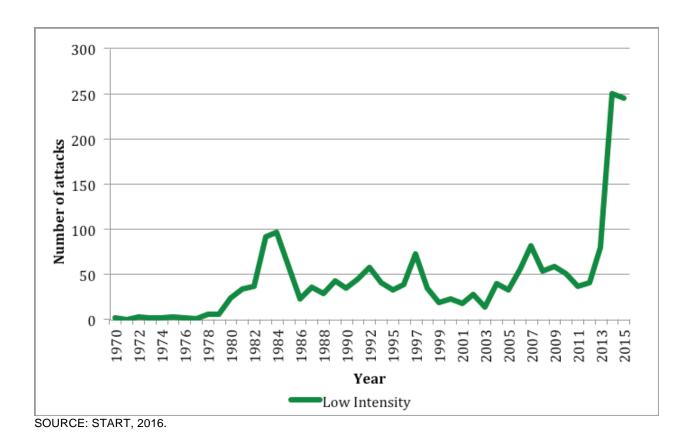
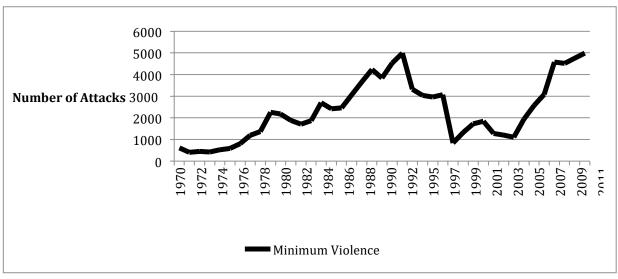


Figure 2.19. Number of Terror Attacks, Minimum Violence (Fewer Than 25 Deaths), GTD, 1970 – 2015



SOURCE: START, 2015.

# Summary

This chapter has summarized trends in conflict across major data sets, conflict types, and intensities, focusing on the period between 1946 and the present. Although each of our data sets uses its own definitions of conflict (or interventions or terrorisms or disputes) and includes slightly different sets of events, the general trends revealed by each of the data sets are largely the same. At the global level and in aggregate terms, conflict has declined in frequency and intensity. This downward trend is clearest and strongest for interstate conflicts and high-intensity conflict. The downward trend in intrastate conflict and low-intensity violence has been somewhat slower and less decisive, including an uptick in 2012–2015. This pattern generally holds, whether we consider ethnic conflict, other forms of low-intensity violence that involve nonstate actors or that occur at the societal level (such as riots, assassinations, guerilla warfare, and terrorism), or more-formal armed conflict between nonstate groups. The decline in interstate *crises* and *disputes* that fall short of war and do not involve violence also has been more muted (those that become violent have become less likely). This suggests that international dispute resolution mechanisms might be able to prevent escalation to war, but also that there is a potential for renewed conflict, perhaps just below the surface.

The review has touched on all cells in the conflict typology (see Table 2.1), highlighting major trends, patterns that extend across data sets and conflict types, and observations that emerge from specific data sources and that apply most directly to particular conflict types. It is also possible to describe overall trends in conflict by considering how the distribution of conflict has moved across the typology matrix (see Table 2.3). Specifically, while medium- to high-intensity interstate violence used to be the predominant form of conflict, lower-intensity forms of violence involving nonstate actors and occurring at the societal level have become more common over time. In other words, we can imagine the concentration of conflict shifting from the upper left to lower right squares in the matrix. From this perspective, conflict has not been eliminated, but rather has changed in nature and intensity.

Table 2.3. Conflict Trends and Typology

	Interstate	Intrastate				
		One-Sided State	State v. Nonstate	Organized Societal	Spontaneous Societal	
High Intensity: Battle deaths of 100,000 per year or 500,000 total	High-intensity conflict was more common in the					
Medium Intensity: Battle deaths of 1,000 per year or 100,000 total	198	0s and early 1990s				
Low Intensity: Battle deaths of 25 per year or 1,000 total				Since ~2001, c		
Minimum Violence: Battle deaths of 0–25 per year; nonviolent conflict/dispute				intensity and		

As noted earlier, the typology will exclude certain forms of criminal violence because of data limitations, and the potentially biasing effect of changes in media reporting could artificially inflate low-intensity conflict incidence. The observed shift in the frequency and intensity of conflict naturally raises the question of what might drive this change and whether these trends might be reversible. There are many domestic, international, and systemic factors that may contribute to the trends we have described in this chapter and that might also contribute to trends in future conflict, including both further reduction and a possible increase in the amount of violence. These key factors and how they might affect conflict trends is the subject of Chapter Three.

# 3. Operationalizing and Projecting Key Factors That Will Influence the Future Incidence of Conflict

## Introduction

If conflict type and intensity has changed over the past few decades, what are some of the reasons for the shifts, and what can we expect in the future? To address these questions, we conducted an extensive review of the massive scholarly literature explaining conflict or the lack of it. We considered a large number of factors that might have affected the prevalence of both interstate and intrastate conflict. Appendix C presents the results of our review. In this chapter, we offer a summary of the factors we identified as most important from our literature review. In subsequent chapters, we integrate data from these factors into a more nuanced set of baseline projections for future conflict incidence and intensity.

Although some evidence exists to support a wide range of potential factors, our review identified ten key factors whose effects on future conflict trends are likely to be most significant. Culling this list to ten was a difficult process. Violent conflict is a complex phenomenon, with any single instance usually attributable to the interaction of several different causes. Explaining the global incidence of conflict is even more complex; the literature investigating violent conflict is therefore correspondingly complex. Social scientists have proposed dozens of variables to explain differing patterns of conflict. Each of these variables, in turn, can be measured in multiple ways. Nonetheless, our review of the literature indicated that some variables have a much better established relationship with conflict than others. The research team identified ten such variables where the link with conflict levels was clear, even if the relative scale of the effects remains a subject of debate.

Many variables investigated in the literature on conflict were not included in our list. The reasons for their exclusion varied, but fell generally into three categories. First, for factors such as the effects of prior conflicts and state repression, there is scholarly debate about whether these factors are themselves causes of conflict (independent variables) or are expressions of deeper, underlying causes. Second, many factors (such as the presence of alliances or rivalries), while likely to affect conflict at the dyadic or state level, were judged to be relatively consistent features of the international system, and therefore unlikely to greatly affect overall future conflict trends. Third, there were several factors (such as the empowerment of women or aging populations) that, while they were potentially promising in explaining conflict trends, had not yet

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<sup>&</sup>lt;sup>1</sup> For example, one survey of the literature on intrastate conflict alone published seven years ago assessed 89 distinct variables; the number of variables proposed by social scientists has grown since then. See Håvard Hegre and Nicholas Sambanis, "Sensitivity Analysis of Empirical Results on Civil War Onset," *Journal of Conflict Resolution*, Vol. 50, No. 4, August 2006, pp. 508–535.

been assessed robustly in the literature. A complete discussion of all of the factors we reviewed is included in Appendix C. The ten key factors we selected are listed here with a short definition.

- The capacity of state institutions. Institutional capacity affects a state's ability to provide public goods, such as infrastructure or security, to their populations and to maintain effective and disciplined security services. The capacity of state institutions is often conceptualized as three-dimensional, composed of military capacity, administrative/bureaucratic capacity, and political institutional coherence and quality.
- The prevalence of consolidated democracies. The distribution and nature of political regime types around the world has varied over time. Consolidated democracies are those that have successfully implemented a range of effective institutional rules and legal procedures constraining the executive, mandating popular election of political leaders, and ensuring civil, political, and minority rights.
- The degree of ethnic and sectarian polarization. Almost all of the world's states are composed of multiple ethnic and sectarian groups, but ethnic and religious identities do not always act as societal cleavages. Societies become polarized along ethnic or sectarian lines as ethnicity and/or religion becomes an important factor for group identification and forms the basis for political organization and the lens through which societal grievances are framed.
- The rate of economic growth. Economies grow at different rates. Expressing the rate of growth in percentage terms from one period to another allows for a calculation of the change in the state's economy in an overall sense and allows for a comparison of rate of growth to other states. High growth rates lead to faster attainment of a developed economy. Highly developed states are less prone to internal conflict. Low economic growth or differential growth rates across groups in a society can fuel grievances that may lead to conflict.
- The extent of economic interdependence. Economic interdependence refers to how interrelated states' economies are with each other in particular and with the global economy in general. There are two key characteristics of economic interdependence that influence countries' likelihood of conflict. First, countries' economic outcomes are affected by external conditions, such as demand in another country or a global economic shock. Second, economic interdependence means that disrupting a country's ties to the international economy would hurt its domestic economy.
- The degree of U.S. preeminence. The international state system is characterized by hierarchy in terms of power. The share of power of the most powerful state within the international state system and vis-à-vis the potential challenger to that state's power position expresses the degree of preeminence of that state. U.S. preeminence is built on the preponderance of U.S. military power and its large share of the international

- economy, the U.S. central role in international governance, and the U.S. position as a supporter and enforcer of international norms.
- The capabilities of international organizations. International organizations can undertake key tasks in the international system, including developing solutions to cross-border problems, mediating disputes, shaping and enforcing of international norms, disseminating information, and generating shared interests and potentially aligning states' preferences. The capabilities of international organizations to undertake these tasks depend on the amount of authority and resources that states delegate to them.
- The strength of international norms. International norms represent collective expectations for the proper behavior of state actors. Strong international norms are ones that are relatively universally held and for which there is relatively universal consensus for the need for norm enforcement. Weaker norms may only be held by (or applied to) some states, or may be held more broadly but for which there is little support when it comes to punishing states that violate the norm.
- The diffusion of lethal technology. Diffusion of lethal technology refers to greater access by states and nonstate actors to the technologies necessary to build and deploy lethal weapons, including nuclear, chemical, biological, radiological weapons, precision munitions, or disruptive cybertechnology.
- The extent of resource stress because of population pressures. Resource stress arises from the scarcity of renewable resources, such as water and arable land, to support the population living in the area. Resource scarcity increases environmental insecurity. The main types of resource scarcity include: (1) supply-induced scarcity, in which resources are consumed at a faster rate than they can be regenerated; (2) demand-induced scarcity, in which previously stable resource consumption increases through an increase in population or increased consumption per capita; and (3) structural scarcity, in which the distribution of resources is uneven and some groups have limited access to resources.

The sections of this chapter examine each of these factors in turn. The discussion of each factor includes:

- an explanation of why the social science literature identifies the factor as a critical determinant of violent conflict
- potential ways to translate each of these factors into a quantifiable variable that can be used to project the future incidence of violent conflict
- an explanation of the specific metrics used for each factor in the remainder of this report
- an exploration of "branch" scenarios, in which the key factor takes on values above or below the baseline projection
- discussion of potential discontinuities (or "shocks") that may lead to much greater changes in the key factor than those that are generally anticipated.

Our operationalizations of the key factors presented should be treated with caution, as the metrics selected provide only a rough proxy measurement for the factors identified by the literature review. In some cases, the factor was difficult to operationalize in one or two metrics; in other cases, limited publicly available data meant that we needed to employ more indirect metrics. We encourage analysts interested in the changing effects of a given factor on conflict to think broadly about potential signs of the factor's increase or decrease, rather than focusing only on the metrics illustrated herein.

These caveats notwithstanding, in most cases, the metrics discussed here show clear trends that allow us to project them into the future. We stress that these are projections, based on extrapolations of historical trends, and they are not predictions about the future. They do, however, begin to help us understand the factors that make some future levels of conflict more likely to occur than others.

While useful, a single projected baseline trend by itself can be misleading, especially from a perspective beyond the immediate future. Consequently, each section in this chapter examines three different projections for the key factor under review: a baseline scenario that represents the "continuation of current trends" (or "expected future") projection for that factor, and two branch scenarios, one above and one below the baseline scenario.

Several different methods were used to project the baseline scenarios, and the method used is specified in the discussion of each key factor. Overall, these methods can be divided into two categories. First, baseline projections for several of the key factors were calculated using the International Futures project, a sophisticated modeling tool that incorporates a range of economic, demographic, and social variables into its analysis. Second, baseline projections were also calculated through the application of a trend line to historical data. The pattern and nature of the historical data determined the type of trend line that could be used; in instances where multiple trend lines were plausible, the one that had the greatest degree of fit with the historical data (as determined by the R<sup>2</sup> value) was used. The branch scenarios were then typically

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<sup>&</sup>lt;sup>2</sup> The International Futures project, along with a detailed description of its methodology, can be found at its website. The International Futures (IFs) tool models the interaction of a series of dynamic, thematic modules, incorporating economic, demographic, sociopolitical, educational, health, international political, agricultural, energy, and infrastructure data. This interactive analysis is performed for 86 countries, drawing on up to 40 years of historical data. As the IFs tool models conditions based on current and historical data, it is not ideal for predicting highly unlikely, "black swan" events that represent sharp discontinuities with the past, although it is possible to modify the parameters of the IFs tool to conduct sensitivity or scenario analyses. In our work, we employed the IFs tool to produce estimates of trends in economic or demographic factors for baseline, "no surprises" futures.

<sup>&</sup>lt;sup>3</sup> We attempted to calculate these trend lines based on historical data from the entire post–1945 period. There were, however, numerous exceptions. Many sources of data were not available for a wide range of countries before 1960, while in other cases, data were not widely available prior to 1970 or even 1990. In addition, for one metric, the prevalence of established democracy in independent states, data from the 1946–1959 period were judged to be misleading because they did not account for the characteristics of still widely prevalent colonial regimes. For this reason, a later time period of post-1960 was used for this metric. It is also important to note that near-term projections may diverge noticeably from the most recent historical data in several cases, and appear to "jump" up or down because they are based on a longer-term historical trend that might or might not closely fit the most recent

calculated as one standard deviation above and below the baseline, with certain exceptions to account for greater potential variation in some factors as we will note.

Taken together, these projections mark the range of the most-likely future values of the key factor. The branch projections effectively function as a confidence interval for our baseline projection, establishing how far the baseline scenario might deviate in conditions of gradual change. Nonlinear, discontinuous changes in key factors are certainly possible, however, and there could be reasons to think they are more likely to occur with some factors than others. For that reason, we include in the overview of each factor a discussion of the dynamics that might lead to such discontinuous changes in the future.

# Capacity of State Institutions

Our literature review identified the capacity of state institutions as one of the primary factors affecting the likelihood of intrastate conflict.4 However, this factor did not appear to exercise a significant effect on interstate conflict.

States with high levels of capacity are better able to avoid intrastate conflict for two primary reasons. First, their greater capacity allows them to provide public goods, such as infrastructure or security, to their populations; this, in turn reduces the frequency of grievances against the government.5 Second, such states are better able to maintain effective and disciplined security services that can deter or defeat internal armed challenges.6

There have been many attempts to operationalize state capacity and both the quality and extent of governance. The metrics include the ratio between tax revenues and gross domestic product (GDP), GDP per capita, government spending, and military spending. All of these metrics have potential merit. However, reliable public data on such metrics as taxation are not readily available, and measures such as GDP per capita are not clearly distinct from other key factors, such as economic growth. We selected a measure of the change in the share of the population with access to public goods, as that would capture the extent to which the capacity of

observations. The value of these projections rests in their direction and slope rather than their specific values — which, in any event, represent only proxy indicators for the key factors.

<sup>&</sup>lt;sup>4</sup> For example, see James D. Fearon and David D. Laitin, "Ethnicity, Insurgency, and Civil War," *American Political Science Review*, Vol. 97, No. 1, 2003, pp. 75–90; Paul Collier, V. L. Elliott, Havard Hegre, Anke Hoeffler, et al., *Breaking the Conflict Trap: Civil War and Development Policy*, Washington, D.C.: World Bank and Oxford University Press, 2003; and Halvard Buhaug, "Relative Capability and Rebel Objective in Civil War," *Journal of Peace Research*, Vol. 43, No. 6, 2006, pp. 691–708.

<sup>&</sup>lt;sup>5</sup> Ted Robert Gurr, *Why Men Rebel*, Princeton, N.J.: Princeton University Press, 1970; Ted Robert Gurr, "Why Minorities Rebel: A Global Analysis of Communal Mobilization and Conflict since 1945," *International Political Science Review*, Vol. 14, No. 2, 1993, pp. 161–201; Fearon, James D., "Self-Enforcing Democracy," *Quarterly Journal of Economics*, Vol. 126, No. 4, November 2011, pp. 1661–1708.

<sup>&</sup>lt;sup>6</sup> Nicole Ball, "Strengthening Democratic Governance of the Security Sector in Conflict-Affected Countries," *Public Administration and Development*, Vol. 25, No. 1, 2005, pp. 25–38; Jeffrey Herbst, *States and Power in Africa: Comparative Lessons in Authority and Control*, Princeton, N.J.: Princeton University Press, 2000; Hegre and Sambanis, 2006.

the state is increasing or decreasing over time, while minimizing the concern that changes in the metric were, in fact, driven by a different key factor, such as the rate of economic growth.

For our specific metric, we calculated the percentage of states where less than 50 percent of the rural population has access to an improved water source, using data available from the World Bank. The rationale for selecting this metric was to identify the prevalence of states that are likely to have extremely low levels of access and therefore be more likely to become involved in intrastate conflict. Figure 3.1 shows the historical data for this metric in black.

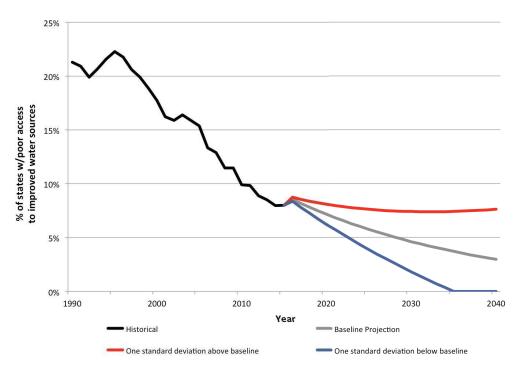


Figure 3.1. Poor Access to Improved Water Sources

SOURCE: Historical data: World Bank, *World Development Indicators 2013*, Washington, D.C., 2013; projections calculated by authors.

To project the baseline, or most likely, scenario, we fit an exponential trend line to the available historical data and calculated the future values.<sup>7</sup> This baseline scenario is shown in the figure in gray. To project the two branch scenarios, we calculated values of one standard deviation above and below the baseline trend. Those scenarios are displayed in the figure in red and blue, respectively. The analysis therefore suggests that the percentage of states with extremely low access is likely to range between 0 and 13 percent by 2040, with the "expected future" scenario at less than 5 percent.

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<sup>&</sup>lt;sup>7</sup> The exponential trend line fit to the data has the equation  $y = 0.2679e^{-0.044x}$ . This trend line had a high level of fit to the data, with an  $R^2$  of 0.92.

There are a number of factors that could lead to discontinuous changes in this metric. For example, a global economic downturn could lead to sharp reductions in development aid that could threaten any improvements in governance that had been made with the benefit of that assistance. Alternatively, a major jump in global energy costs could induce widespread fiscal crises similar to those of the 1970s and 1980s, ultimately leading to reduced state capacity. The branch scenario in red projects essentially no improvements in state capacity over the period in question, so larger changes would entail the rapid erosion of the capacity of states that are already relatively capable. Such changes are certainly possible, but they would constitute an example of nonlinear disruptive change. On balance, our projection is that state capacity is likely to continue to improve, which will tend to exert a downward pressure on the likelihood of intrastate conflict.

#### Prevalence of Consolidated Democracies

Consolidated democracies are less likely to fight one another and to be involved in internal conflict. While this correlation is clear, the mechanism by which democracies reduce conflict is more contested. The literature on interstate conflict has focused on the greater transparency and consistency of democratic regimes that allow them to credibly commit to peaceful solutions to disputes and the possibility that domestic norms and greater political accountability may make democratic states less likely to pursue violent conflicts. There are fewer arguments that the greater ability of consolidated democracies to resolve grievances within the political system leads to less intrastate conflict. We note, however, that partial democracies or the process of democratization itself may not be particularly peaceful and may even be associated with an increase in conflict. 10

Given the importance of consolidated democracy in the literature on conflict, there is already a great deal of work in the academic literature on measurement of democracy. Several aggregate measures of democracy have been developed that include the competitiveness of elections; the state's respect for civil, political, and minority rights; and freedoms of the press and religion.

The most widely used measure of consolidated democracy, and the one we employ, comes from the Polity project. By coding a wide range of regime characteristics, such as political

<sup>&</sup>lt;sup>8</sup> Arend Lijphart, *Democracies: Patterns of Majoritarian and Consensus Government in Twenty-One Countries*, New Haven, Conn., and London: Yale University Press, 1984; Peter Liberman, *Does Conquest Pay? The Exploitation of Occupied Industrial Societies*, Princeton, N.J.: Princeton University Press, 1996; Charles Lipson, *Reliable Partners: How Democracies Have Made a Separate Peace*, Princeton, N.J.: Princeton University Press, 2003.

<sup>&</sup>lt;sup>9</sup> Håvard Hegre, Tanja Ellingsen, Scott Gates, and Nils Petter Gleditsch, "Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War, 1816–1992," *American Political Science Review*, Vol. 95, No. 1, March 2001, pp. 33–48; Christian Davenport, *State Repression and the Domestic Democratic Peace*, New York, N.Y.: Cambridge University Press, 2007.

<sup>&</sup>lt;sup>10</sup> Hegre et al., 2001; Lars-Erik Cederman, Kristian Skrede Gleditsch, and Simon Hug, "Elections and Ethnic Civil War," *Comparative Political Studies*, Vol. 46, No. 3, 2012, pp. 387–417.

competition and constraints on the executive, an aggregate "Polity score" is produced, ranging from –10 to 10. Values of 6 or higher are typically used to identify the presence of a democracy, with a more conservative measurement of 8 or higher often used to identify consolidated democracies. We use this metric to calculate the percentage of all states that are consolidated democracies, with the historical values denoted by the black line in Figure 3.2.

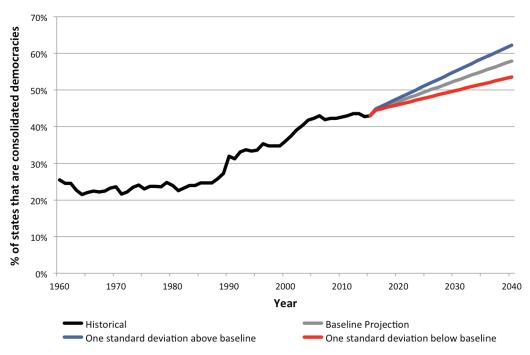


Figure 3.2. Prevalence of Consolidated Democracies

SOURCE: Historical data: Monty G. Marshall and Keith Jaggers, *Polity IV Data Set [Computer file; version p4v2012]*, College Park, Md.: Center for International Development and Conflict Management, University of Maryland, 2002; projections calculated by authors.

We projected the baseline scenario by fitting a trend line to the historical data and calculating the future values.<sup>11</sup> This projection is represented in the figure by the gray line. We calculated the two branch scenarios as one standard deviation above and below the baseline projection; they are shown in the figure by the blue and red lines, respectively.

Discontinuous growth in the prevalence of democracies could result from various tipping-point effects. If a high percentage of the world's population were governed through democracy, other forms of government may come to be seen as illegitimate, and greater international pressure may be brought to bear to remove them. Within the time frame of our study, a dramatic reversal in the prevalence of consolidated democracies appears to be less likely. The reversion of

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<sup>&</sup>lt;sup>11</sup> The trend line was fit using a generalized linear model linked to a binomial logit function. The resulting projections are therefore bounded between 0 and 1 (in this case, 0 and 100 percent). The model used in Figure 3.2 has a Pearson statistic (1/df) of .0037, suggesting a high degree of fit with the data.

consolidated democracies to autocracies historically has been extremely rare and is unlikely in the absence of extreme economic decline, the conquest of democracies by more powerful autocracies, or both. Either of these potential paths is likely to lead directly to increases in future conflict levels as well.

### Degree of Ethnic and Sectarian Polarization

The academic literature generally agrees that a high level of ethnic and sectarian polarization is not sufficient by itself to cause conflict either within or between states. However, there is also agreement that in the intrastate context, where group mobilization occurs along ethnic lines, identity can become a significant contributing factor for violence, especially when strengthened by socioeconomic and sociopolitical grievances. Consequently, we identified the degree of ethnic and sectarian polarization as one of the primary factors likely to affect the level of intrastate conflict in the future.

Evidence also shows that while ethnicity may not lead to conflict by itself, it may work to prolong conflicts and increase the intensity of violence in those conflicts that are already occurring. Such effects will most likely be strengthened if ethnic groups are deliberately disadvantaged by the state or if they are territorially based and have secessionist or separatist demands. Scholars tend to agree that ethnic and sectarian polarization, while a strong predictor for increased levels of intrastate conflict, is not a strong driver for conflicts between states. However, if regional and international actors become involved in intrastate conflicts, or if conflicts spread across borders, such polarization could also affect levels of interstate conflict. Such a scenario is especially likely where ethnic kin-groups in neighboring states become involved with secessionist movements.

Quantifying ethnic and sectarian polarization is inherently difficult. While various measures have been tried, such as linguistic differences (e.g., ethno-linguistic fractionalization) or religious preferences, they are often criticized for not capturing the cleavage that gives rise to political mobilization. For example, different ethnic groups may share the same religion, and one ethnic group may speak multiple languages. It can also be difficult to determine when certain identities in a society are increasing in salience, and when they are becoming less relevant. One prominent

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<sup>&</sup>lt;sup>12</sup> Rajat Ganguly and Raymond Taras, *Understanding Ethnic Conflict: The International Dimension*, Longman Publishers, 2002; Fearon and Laitin, 2003; and Daniel Bar-Tal, "Sociopsychological Foundations of Intractable Conflicts," *American Behavioral Scientist*, Vol. 50, No. 11, 2007.

<sup>&</sup>lt;sup>13</sup> Gurr, 1970; Stephen M. Saideman, and William R. Ayres, "Determining the Causes of Irredentism: Logit Analyses of Minorities at Risk Data from the 1980s and 1990s," *Journal of Politics*, Vol. 62, No. 4, November 2000, pp. 1126–1144; Monica Duffy Toft, *The Geography of Ethnic Violence: Identity, Interests, and the Indivisibility of Territory*, Princeton, N.J.: Princeton University Press, 2003.

<sup>&</sup>lt;sup>14</sup> John A. Vasquez, and Brendan Valeriano, "Territory as a Source of Conflict and a Road to Peace," in Jacob Bercovitch, Viktor Kremenyuk, and I. William Zartman, eds., *The Sage Handbook of Conflict Resolution*, Los Angeles, Calif.: SAGE, 2009, pp. 193–209.

attempt to quantify relevant ethnic identities is the Minorities at Risk data set at the University of Maryland, which identifies minority groups by their "at risk" status—that is, by the extent to which they are disadvantaged in their relationships with other groups in the state in which they reside. However, the Minorities at Risk data identify such "at risk" groups somewhat subjectively, and the project does not claim to be comprehensive. An alternative, objective measure is to look for the degree of formal discrimination against ethnic, religious, or linguistic groups. The creation or removal of official laws providing for formal discrimination can help to identify states where identity-based grievances may become more or less salient.

For capturing the degree of ethnic and sectarian polarization, therefore, we looked at the percentage of states with formal discrimination against minorities, where such minority groups make up at least 5 percent of the state's population. We used the Ethnic Power Relations data set (EPR), which tracks the extent of access to state power for all politically relevant ethnic groups in every country of the world from 1946 to 2013. It includes annual data on more than 733 groups and codes the degree to which their representatives held executive-level state power—from total control of the government to being formally barred from holding political office. While the disadvantage of such a proxy may be that it potentially fails to capture some of the unofficial social discrimination that can lead to group mobilization, the advantage is that it allows for a more objective measure of sectarian tension. The overall levels of ethnic or sectarian polarization in the figure below may therefore be understated, but we can have more confidence in the general trend line than we could with more subjective data sources.

We projected the baseline scenario by fitting an exponential trend line to the available historical data and calculating the future values. <sup>15</sup> The projection is shown by a gray line in Figure 3.3. We calculated the two branch scenarios as one standard deviation above and below the baseline projection; they are shown by a red and blue line, respectively.

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<sup>&</sup>lt;sup>15</sup> The exponential trend line fit to the data has the equation:  $y = 0.3098e^{-0.012x}$ . The trend line has a high degree of fit with the data, with an  $R^2$  of 0.85.

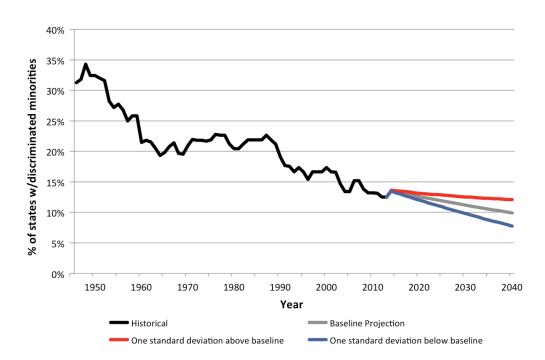


Figure 3.3. Percentage of States with Discriminated Minorities

SOURCE: Historical data: Andreas Wimmer, Lars-Erik Cederman, and Brian Min, "Ethnic Politics and Armed Conflict: A Configurational Analysis of a New Global Data set," *American Sociological Review*, Vol. 74, No. 2, 2009, pp. 316–337; projections calculated by authors.

Discontinuous change in this variable may occur as a result of several factors. Historically, ethnic and sectarian factors often have increased in relevance after the breakup of larger states and empires, including the breakup of the Soviet Union in the early 1990s, or the end of colonialism in the 1960s. The breakup of other large, multiethnic states in the future could result in a similar outcome. Extremely high levels of resource stress because of population pressures also could prompt increased ethnically based conflict within states. Ethnic and sectarian polarization and grievances are latent in many societies, and may become politically important in order to mobilize groups to violence under conditions of severe resource or economic privation.

#### Rate of Economic Growth

Economic growth affects the prevalence of conflict in several ways. While territorial expansion traditionally has been a major cause of interstate war, states with higher levels of economic development may be less motivated to pursue such expansion because of the lower relative value of land inputs in an industrialized economy. Moreover, their reliance on international capital markets may increase the potential costs of disruptions from serious

international crises.<sup>16</sup> At the intrastate level, economic growth (if broadly shared) reduces grievances, bolsters the capacity of the state to handle security challenges, and increases the population's opportunities for licit employment, thus raising the opportunity costs of participating in rebellions or insurgencies.<sup>17</sup> Growth benefits that accrue along ethnic or sectarian lines, however, might increase the potential for intrastate conflict, as discussed in the previous section, and sharp declines in the rate of economic growth could be associated with an increased risk of internal conflict as well.<sup>18</sup>

Therefore, there are at least two different concepts that any operationalization of this factor should attempt to capture: the overall level of economic development and changes in the rate of economic growth. Over the short term, wealthy countries tend to remain wealthy and poor countries tend to remain poor, and their degree of wealth may have a strong effect on their overall likelihood of being involved in conflict. In addition, sharp declines in the rate of growth for a range of states may increase their likelihood of intrastate conflict in particular.

We employed two different metrics for this key factor: the rate of global GDP growth and the percentage of states with a GDP per capita greater than USD\$10,000.<sup>19</sup> The former shows the aggregate level of economic instability on a year-to-year basis, while the latter identifies the percentage of states that are relatively wealthy and therefore less likely to become involved in conflict. Both metrics are derived from data available through the World Bank, and their historical values are shown in black in Figures 3.4 and 3.5.

<sup>&</sup>lt;sup>16</sup> Robert Gilpin, *War and Change in International Politics*, Cambridge, UK: Cambridge University Press, 1981; Erik Gartzke, "The Capitalist Peace," *American Journal of Political Science*, Vol. 51, No. 1, 2007, pp. 166–191; Michael Mousseau, "The Social Market Roots of Democratic Peace," *International Security*, Vol. 33, No. 4, 2009, pp. 52–86.

<sup>&</sup>lt;sup>17</sup> Collier et al., 2003; Halvard Buhaug, Kristian Skrede Gleditsch, Helge Holtermann, Gudrun Østby, and Andreas Forø Tollefsen, "It's the Local Economy, Stupid! Geographic Wealth Dispersion and Conflict Outbreak Location," *Journal of Conflict Resolution*, Vol. 55, No. 5, 2011, pp. 814–840; Zeynep Taydas and Dursun Peksen, "Can States Buy Peace? Social Welfare Spending and Civil Conflicts," *Journal of Peace Research*, Vol. 49, No. 2, 2012, pp. 273–287.

<sup>&</sup>lt;sup>18</sup> Gurr, 1970; Theda Skocpol, *States and Social Revolutions*, New York, N.Y.: Cambridge University Press, 1979; Edward Miguel, Shanker Satyanath, and Ernest Sergenti, "Economic Shocks and Civil Conflict: An Instrumental Variables Approach," *Journal of Political Economy*, Vol. 112, No. 4, August 2004, pp. 725–753.

<sup>&</sup>lt;sup>19</sup> Theoretically, the indicators we use are not as desirable as more-nuanced metrics that more directly identify types of economic growth that could be linked with levels of conflict, such as those that reflect the distribution of w ealth within states. Unfortunately, data for such metrics were not available for a sufficiently wide range of states and over a sufficiently long time period to be used for our study.

6% Annual % global growth rate 3% -2% 1970 1980 1990 2000 2010 2020 2030 1960 2040 Year Historical Baseline Projection One standard deviation above baseline One standard deviation below baseline

Figure 3.4. Global GDP Growth Rate

SOURCE: Historical data: World Bank, 2015; projections calculated by authors.

To calculate the baseline projections for each metric, we relied on two different methodologies. We calculated the baseline projected global rate of GDP growth using the International Futures project.<sup>20</sup> As evidenced by the pattern in Figure 3.4, GDP growth rates historically have experienced a great deal of year-to-year variation, and this volatility is likely to continue. However, projecting the pattern of this volatility is extraordinarily difficult, so future projections can at best suggest the direction of the long-term trend. Futures with higher long-term growth rates are likely to experience fewer sharp declines in annual growth rates, while futures with lower long-term growth rates are likely to experience such declines more frequently. Our projections for GDP growth rates should be interpreted in this light.

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 $<sup>^{20}</sup>$  The operation of the International Futures model is discussed in the introduction to this chapter.

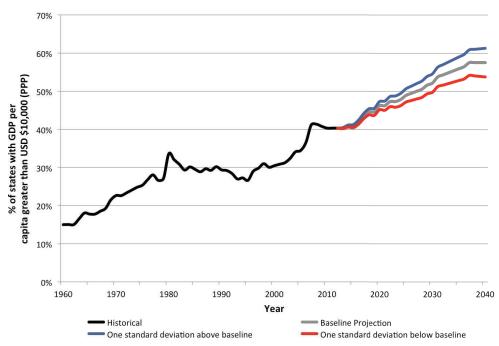


Figure 3.5. Wealthy States as a Percentage of the World's States

SOURCE: Historical data: World Bank, 2013; projections calculated by authors.

We arrived at the baseline projection for the number of wealthy states by again using the International Futures model. Baseline projections are displayed in Figures 3.4 and 3.5 in gray. For both metrics, we projected the branch scenarios by calculating one standard deviation above and below the baseline scenario, shown on the two figures in blue and red, respectively.

Numerous factors could lead to greatly increased economic volatility and lower growth over the period in question. Ongoing policy concerns, such as the cohesion of the Euro area, have the potential to provide negative shocks to global growth rates that may not be properly captured by projections based on historical experiences. However, greatly increased economic volatility is a much more plausible future than one in which a large number of already wealthy states see their overall GDP levels decline significantly. Such a decline would likely need to be accompanied by a more severe shock, such as a global pandemic or ecological disaster.

## Extent of Economic Interdependence

Economic interdependence may reduce the likelihood of interstate conflict in two primary ways. Increased economic integration raises the costs that states will bear if conflict disrupts trade.<sup>21</sup> Increased trade also provides a mechanism to share vital natural resources that a state

<sup>&</sup>lt;sup>21</sup> Solomon William Polachek, "Conflict and Trade," *Journal of Conflict Resolution*, Vol. 24, No. 1, 1980, pp. 55–78; Bruce M. Russett and John R. Oneal, *Triangulating Peace: Democracy, Interdependence, and International Organizations*, New York, N.Y.: W. W. Norton & Company, 1999; Alberto Alesina, Enrico Spolaore, and Romain Wacziarg, "Trade, Growth and the Size of Countries," *Handbook of Economic Growth*, Vol. 1, 2005, pp. 1499–1542.

might otherwise seek to control and exploit on its own.<sup>22</sup> Both of these mechanisms are likely to reduce levels of interstate conflict. There is no evidence that suggests any significant effects on intrastate conflict levels directly because of increasing economic interdependence.

The extent of economic interdependence can be operationalized in a number of different ways. While measures of exports and imports, both overall and with specific partners, are the most commonly used metric, scholars have also explored measures that involve openness to trade, trade in specific important commodities, and capital flows and financial integration. For each metric, the literature emphasizes the importance of comparing the scope of the interdependence with the size of the state's economy.

The metric used in our project is that most commonly used in the literature, the ratio of exports and imports to GDP. We calculated our measure at the global level, but data at the state or dyadic level could also be used. Our data were drawn from the International Futures project, although the original source for the historical data is the World Bank's World Development Indicators.

The baseline projection for the extent of global economic interdependence also comes from the International Futures project, which (as already discussed) relies on a complex model incorporating a range of economic, social, and political variables. This projection is shown in Figure 3.6 in gray. We calculated the branch scenarios using one standard deviation above and below the baseline projection; they are shown in blue and red, respectively.

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<sup>&</sup>lt;sup>22</sup> Richard N. Rosecrance, *The Rise of the Trading State: Commerce and Conquest in the Modern World*, Vol. 386, New York, N.Y.: Basic Books, 1986; Tony Allen, "Watersheds and Problemsheds: Explaining the Absence of Armed Conflict over Water in the Middle East," *Middle East* 2, No. 1, 1998, p. 50.

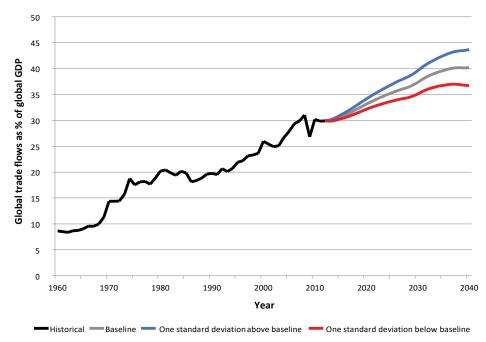


Figure 3.6. Economic Interdependence

SOURCE: Historical data: World Bank, 2013; projections calculated by authors.

Economic interdependence is likely to continue to increase, absent significant shocks to the international system. The last major contraction in global levels of interdependence began as a result of the First World War, and major power conflict remains the most likely mechanism for reducing trade flows. A serious global pandemic would also likely have the effect of greatly reducing international trade. Absent such a system-level shock, however, increases in economic interdependence are likely to be robust and persistent.

# Degree of U.S. Preeminence

The high relative power of the United States vis-à-vis other major powers in the international state system since the end of the Second World War may have reduced interstate conflict in several ways. The relative dominance may have reduced the incidence of great power conflicts, including large-scale global conflicts, as the U.S. position makes a direct military challenge to it or its close allies unlikely to succeed.<sup>23</sup> U.S. dominance also may have enabled the creation of a security community among U.S. allies in Europe (and, to a lesser extent, East Asia), as the United States could effectively deter any conflicts by credibly promising to counter the

<sup>&</sup>lt;sup>23</sup> A. F. K. Organski and Jacek Kugler, *The War Ledger*, Chicago, Ill.: University of Chicago Press, 1981; Paul K. Huth, "Extended Deterrence and the Outbreak of War," *American Political Science Review*, 1988, pp. 423–443; Thomas J. Volgy and Lawrence E. Imwalle, "Hegemonic and Bipolar Perspectives on the New W orld Order," *American Journal of Political Science*, Vol. 39, No. 4, 1995, pp. 819–834.

aggressor.<sup>24</sup> The United States may also have reduced the incidence of interstate conflict during its period of dominance by actively mediating disputes between lesser powers, though the evidence for this argument is more contested.<sup>25</sup>

At the level of intrastate conflict, greater power parity tends to fuel "proxy conflicts." One of the clearest patterns in the historical data on intrastate conflict is the influence of the Cold War. Globally, the number of internal conflicts peaked in the late Cold War era, when both the United States and the Soviet Union were committed to indirect support for partner regimes and insurgent groups around the world. The withdrawal of superpower support from these actors following the end of the Cold War led to the durable termination of many of these conflicts, and the overall number of intrastate conflicts has fallen in the decades since in the absence of a global challenger to the United States.

The relative power of the United States can be measured in several ways. Comparisons of military and power-projection capabilities may be helpful in certain circumstances, and diplomatic and cultural interactions may be more relevant in others. Over the long term, however, the economic base of the United States will largely determine its ability to sustain and project power. The comparison of the economic capacity of the United States and other states is therefore likely to provide the best long-term method for identifying changes in the relative preeminence of the United States. To this end, this project utilizes the ratio of U.S. to global GDP to estimate the relative power of the United States over time.<sup>27</sup> The historical values of this metric can be seen in black in Figure 3.7.

We calculated the baseline projection for the ratio of U.S. to global GDP metric by fitting a trend line to the historical data and calculating the implied future values.<sup>28</sup> This projection is shown in Figure 3.7 in gray. We calculated the branch scenarios using one standard deviation above and below the baseline scenario; they are shown in the figure in blue and red, respectively.

John J. Mearsheimer, "Back to the Future: Instability in Europe after the Cold War," *International Security*, Vol. 15, No. 1, 1990, pp. 5–56; Robert J. Art, "Why Western Europe Needs the United States and NATO," *Political Science Quarterly*, Vol. 111, No. 1, 1996, pp. 1–39; Stephen Van Evera, "Primed for Peace: Europe After the Cold War," *International Security*, Vol. 15, No. 3, 1990, pp. 7–57.

<sup>&</sup>lt;sup>25</sup> Charles P. Kindleberger, "Hierarchy Versus Inertial Cooperation," *International Organization*, Vol. 40, No. 4, 1986, pp. 841–847; Richard K., Betts, "Wealth, Power, and Instability: East Asia and the United States After the Cold War," *International Security*, Vol. 18, No. 3, 1994, pp. 34–77; G. John Ikenberry, "America's Imperial Ambition," *Foreign Affairs*, Vol. 81, No. 5, 2002, pp. 44–60.

<sup>&</sup>lt;sup>26</sup> Odd Arne Westad, "Rethinking Revolutions: The Cold War in the Third World," *Journal of Peace Research*, 1992, pp. 455–464; Gaddis, 1986.

<sup>&</sup>lt;sup>27</sup> Angus Maddison, *The World Economy: Historical Statistics*, Development Centre of the Organisation for Economic Co-operation and Development, Paris, France, 2003; 2012 update; Salem H. Khamis, "On Aggregation Methods for International Comparisons," *Review of Income and Wealth*, Vol. 30, No. 2, 1984, pp. 185–205. We calculated both measures using data from Maddison and using constant 1990 Geary-Khamis dollars. A common unit for the comparison of international expenditures, Geary-Khamis dollars account for both purchasing power parity and commodity prices.

The linear trend line fit to the data has the equation: y = -0.0027x + 0.3764. The trend line has a moderately high degree of fit with the data, with an R2 of 0.68.

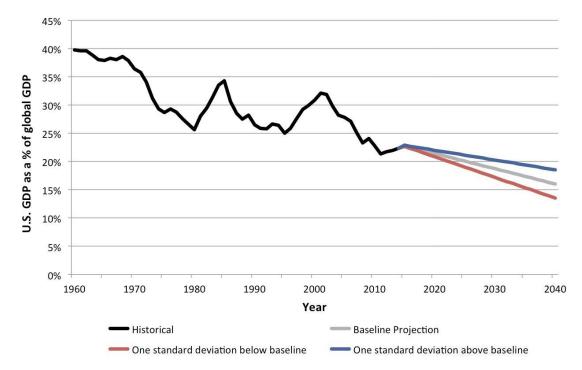


Figure 3.7. Ratio of U.S. GDP to Global GDP

SOURCE: Historical data: World Bank, 2015; projections calculated by authors.

The decline in the relative dominance of the United States is the product of a number of long-term historical trends, most notably the continued economic development of China and India, the effects of which are in many ways beneficial to the United States. Given the broad historical basis of this trend, it is likely to continue, although its pace could fluctuate because of developments in the United States and in other countries. For example, China's ability to maintain its recent high levels of economic growth and political stability over the next 25 years remains in question. One additional way that the relative power of the United States could fluctuate more could stem from changes in alliances. Currently, Figure 3.7 understates the degree of U.S. power and influence, as many of the other most-powerful states in the system are also close U.S. allies and likely to support the United States in the event of a conflict. If these alliance relationships were to decay, however, this could limit U.S. power and influence more suddenly than would gradual shifts in relative capabilities driven by long-term economic growth.

# Capabilities of International Organizations

International organizations have the ability to reduce conflict in three primary ways. International organizations (such as the United Nations) undertake peacekeeping missions that discourage antagonistic parties from restarting hostilities.<sup>29</sup> Other international organizations (such as the World Trade Organization or the International Court of Justice) provide a forum and coordinating mechanism for the resolution of disputes before they escalate to violence.<sup>30</sup> International organizations may also promote the spread of norms that encourage peaceful dispute settlement, a possibility that we discuss in greater detail in the next section.

The effectiveness of international organizations in reducing conflict will vary depending on their capabilities. Measuring changes in these capabilities over time is difficult. For example, an increase in UN peacekeeping missions may be driven by an increase in overall levels of conflict as much as by an increase in the ability of the UN to tackle more-difficult missions. Ultimately, however, international organization capabilities are a function of the level of support member states give their activities (international organizations do not, as yet, possess any significant independent budgetary or coercive capabilities). Rhetorical support for international organizations is difficult to measure and is questionable as an indicator of capabilities, so the most promising way to operationalize the capabilities of international organizations is to look at their budgets, which are provided voluntarily by member states. This metric has caveats, in that there may be a "pull" aspect to budgeting in which an increase in conflict demands an increase in peacekeeping missions, in addition to the "push" aspect by which states invest international organizations with greater money and capacity. Conversely, an extremely effective UN might deter conflicts, reducing the need to undertake peacekeeping missions and, thus, reducing the need for a large peacekeeping budget. Given the difficulties associated with many UN peacekeeping missions, however, this is not a major concern.

With these caveats in mind, we selected the annual UN peacekeeping budget as our operationalization of this key factor.<sup>31</sup> Our historical data came from the UN and the Global Policy Forum, which provides a range of UN-related quantitative data, and is illustrated as the black line in Figure 3.8.<sup>32</sup>

<sup>&</sup>lt;sup>29</sup> Michael W. Doyle and Nicholas Sambanis, *Making War and Building Peace*, Princeton, N.J.: Princeton University Press, 2006; Ernst B. Haas, *Why We Still Need the United Nations: The Collective Management of International Conflict, 1945–1984*, Vol. 26, University of California, 1986; Joshua S. Goldstein, *Winning the War on War*, New York, N.Y.: Penguin Group, 2011.

<sup>&</sup>lt;sup>30</sup> Kenneth W. Abbott and Duncan Snidal, "Why States Act Through Formal International Organizations," *Journal of Conflict Resolution*, Vol. 42, No. 1, 1998, pp. 3–32; Bruce M. Russett, John R. Oneal, and David R. Davis, "The Third Leg of the Kantian Tripod for Peace: International Organizations and Militarized Disputes, 1950 –85," *International Organization*, Vol. 52, No. 3, 1998, pp. 441–467; Charles Boehmer, Erik Gartzke, and Timothy Nordstrom, "Do Intergovernmental Organizations Promote Peace?" *World Politics*, Vol. 57, No. 1, 2004, p. 1.

<sup>&</sup>lt;sup>31</sup> While the UN is certainly the most capable international organization, regional organizations, such as the Organization for Security and Co-operation in Europe or the Economic Community of West African States, have also played important roles in conflict prevention and mitigation. However, comprehensive data for such regional organizations could not be located within the scope of this inquiry. Data from the UN are therefore used as a representative proxy metric.

<sup>&</sup>lt;sup>32</sup> Michael Renner, "Peacekeeping Expenditures in Current vs. Real Terms: 1947–2005," Global Policy Forum, undated; United Nations Peacekeeping, "Financing Peacekeeping," undated. Conversions to 2004 USD made by the authors using the U.S. Inflation Calculator, undated.

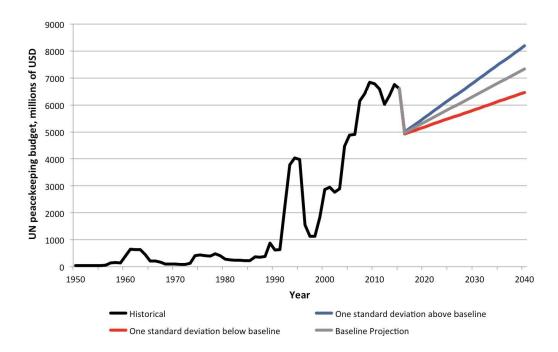


Figure 3.8. UN Peacekeeping Budget

SOURCE: Historical data: Renner, undated; United Nations Peacekeeping, undated. Projections calculated by authors.

We determined the baseline projection for the future capabilities of international organizations by fitting a linear trend line to the historical data and calculating the implied future values.<sup>33</sup> This projection is portrayed in the figure in gray. We calculated the branch scenarios using one standard deviation above and below the baseline projection; those are reflected by the blue and red lines, respectively.

While these projections already suggest a fairly high range of potential variation in the capabilities of international organizations over the next 25 years, other factors could produce even more dramatic shifts. Major shifts in the global distribution of power, including a decline in the relative power of the United States, could increase the virulence of international competition and erode the global consensus necessary for international organizations to operate effectively. Additionally, the breakdown of international norms of peaceful dispute settlement could reduce the support for international organizations by at least some key actors and, as a result, limit their capabilities.

61

 $<sup>^{33}</sup>$  The linear trend line fit to the data has the equation: y = 98.651x - 1549. The trend line has a moderately high degree of fit with the data, with an R<sup>2</sup> of 0.68.

## Strength of International Norms

International norms may have discouraged the incidence of conflict through three primary mechanisms. First, international norms limit the situations in which policymakers will consider a resort to violence to be acceptable, reducing the incidence and intensity of both interstate and intrastate violence.<sup>34</sup> Second, norms help to mobilize and coordinate international efforts to punish states that initiate violence against their neighbors or their populations.<sup>35</sup> Third, norms may have played a specific role in promoting the territorial integrity of states and reducing the incidence of territorial disputes, historically a primary cause of interstate conflict.<sup>36</sup> However, while norms regarding territorial integrity may have helped to reduce interstate conflict, they also may have exacerbated intrastate conflicts in postcolonial states with borders that are not fully accepted by segments of their populations and lacking in institutional capacity to govern their territories.<sup>37</sup>

Measuring and tracking the effects of norms of peaceful state behavior over time poses problems. Statements of support for such norms can be empty, while a state alternately may feel pressured to adhere to a norm but unwilling to publicly acknowledge that pressure. Flagrant violations of peaceful norms that go unpunished or unremarked upon represent clear signs that the strength of a norm has degraded, but such measures may be apparent too late to be useful to analysts. The ratification and maintenance in force of treaty commitments embodying a norm, which can be both acceded to or withdrawn from, may provide a more sensitive leading indicator of the relative strength of such norms over time.

For our operationalization of this factor, therefore, we looked at the percentage of states over time with multiple multilateral treaty commitments to pacific dispute settlement. These data come from the Multilateral Treaties of Pacific Settlement data set (MTOPS), and are shown in Figure 3.9 in black.

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<sup>&</sup>lt;sup>34</sup> Mueller, 1989; John Mueller, *The Remnants of War*, Ithaca, N.Y.: Cornell University Press, 2004; Pinker, 2011.

<sup>&</sup>lt;sup>35</sup> Martha Finnemore and Kathryn Sikkink, "International Norm Dynamics and Political Change," *International Organization*, Vol. 52, No. 4, 1998, pp. 887–917; David Chandler, "The Responsibility to Protect? Imposing the 'Liberal Peace," *International Peacekeeping*, Vol. 11, No. 1, 2004, pp. 59–81.

<sup>&</sup>lt;sup>36</sup> Mark W. Zacher, "The Territorial Integrity Norm: International Boundaries and the Use of Force," *International Organization*, Vol. 55, No. 2, 2001, pp. 215–250; Paul R. Hensel, Michael E. Allison, and Ahmed Khanani, "Territorial Integrity Treaties and Armed Conflict over Territory," *Conflict Management and Peace Science*, Vol. 26, No. 2, 2009, pp. 120–143.

<sup>&</sup>lt;sup>37</sup> Robert H. Jackson, *Quasi-States: Sovereignty, International Relations and the Third World*, Vol. 12, Cambridge Studies in International Relations, Cambridge University Press, 1990; Boaz Atzili, "When Good Fences Make Bad Neighbors: Fixed Borders, State Weakness, and International Conflict," *International Security*, Vol. 31, No. 3, 2007, pp. 139–173.

To calculate the baseline future scenario, we fit a trend line to the historical data, and calculated the implied future values; this is indicated by the gray line in the figure.<sup>38</sup> The branch scenarios were determined by calculating two standard deviations above and below the baseline scenario, shown in the figure in blue and red, respectively. This represents a higher degree of potential deviation than we used for most of the ten key factors. Norms rely on the consensus of the major powers for their strength and operation. Given the potential for changes in the relations and distribution of power between the major powers over the next 25 years, there is an increased potential for breakdown in this consensus, and therefore a higher level of variation in the branch values of the projected strength of norms was warranted.

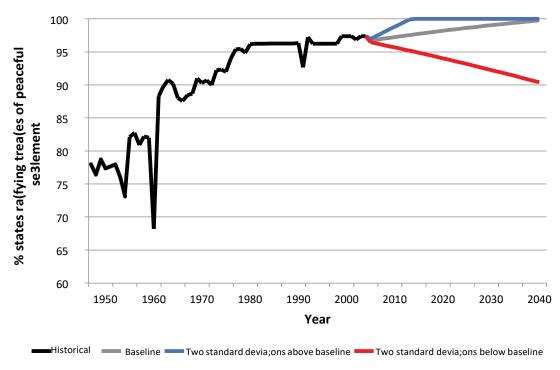


Figure 3.9. States with Treaty Commitments to Peaceful Dispute Settlement

SOURCE: Historical data: Paul R. Hensel, *Multilateral Treaties of Pacific Settlement (MTOPS) Data Set*, version 1.4, 2005; projections calculated by authors.

<sup>&</sup>lt;sup>38</sup> The trend line was fit using a generalized linear model linked to a binomial logit funct ion. The resulting projections are therefore bounded between 0 and 1 (in this case, 0 and 100 percent). The model used in Figure 3.9 has a Pearson statistic (1/df) of .00080, suggesting a high degree of fit with the data.

The strength of international norms over the next 25 years is subject to much fluctuation. The likeliest source of discontinuous change in the strength of international norms is a breakdown in consensus among the major powers on how the international system should operate. A clear challenge to the norm of territorial integrity by a major rising power through an expansion of its territorial claims against its neighbors would represent such a development. Indeed, a small number of determined violators of established norms, even if they are not major powers, would likely be sufficient to undermine the strength of the norm if their behavior is not punished. There are also ways in which the strength of international norms could increase. Currently, consensus is lacking among the major powers over the legitimacy of international intervention to prevent atrocities against civilian populations. Should this change, it would strengthen international norms regarding the treatment of civilian populations and potentially help further reduce the incidence and intensity of intrastate conflict.

## Diffusion of Lethal Technology

The diffusion of lethal technologies to states and nonstate actors has the potential to increase both the likelihood and the lethality of conflict. The proliferation of nuclear weapons to a wider range of states may limit the prospects for direct military confrontations between states, while increasing the likelihood of related internal or proxy conflicts. <sup>39</sup> The diffusion of non-nuclear advanced weaponry, such as precision-guided munitions, to a wider range of states may homogenize their relative power, in turn making interstate conflict more likely. <sup>40</sup> Nonstate actors who acquire advanced precision-guided weapons or biological weapons capabilities would have the ability to significantly increase the lethality of their attacks. <sup>41</sup>

It is difficult to identify quantifiable metrics for many of these potentially lethal technologies. Determining whether and when states or nonstate actors acquired the capability to produce biological weapons or other advanced lethal technologies using unclassified sources is problematic. We explored various potential proxy measures, including the broader spread of advanced technologies with commercial applications and the number of doctorates granted in

<sup>&</sup>lt;sup>39</sup> Glenn H. Snyder, *The Balance of Power and the Balance of Terror*, San Francisco, Calif.: Chandler Publishing, 1965; Robert Jervis, *The Meaning of Nuclear Revolution: Statecraft and the Prospect of Armageddon*, Ithaca, N.Y.: Cornell University Press, 1989; Kenneth N. Waltz, "Nuclear Myths and Political Realities," *The American Political Science Review*, 1990, pp. 731–745.

<sup>&</sup>lt;sup>40</sup> Michael G. Vickers and Robert C. Martinage, *The Revolution in War*, Washington, D.C.: Center for Strategic and Budgetary Assessments, 2004; Michael C. Horowitz, *The Diffusion of Military Power: Causes and Consequences for International Politics*, Princeton, N.J.: Princeton University Press, 2010; Thomas G. Mahnken, "Weapons: The Growth and Spread of the Precision-Strike Regime," *Daedalus*, Vol. 140, No. 3, 2011, pp. 45–57.

<sup>&</sup>lt;sup>41</sup> Jan van Aken and Edward Hammond, "Genetic Engineering and Biological Weapons," *European Molecular Biology Organization Reports*, Vol. 4, 2003, pp. S57–S60; Christopher F. Chyba and Alex L. Greninger, "Biotechnology and Bioterrorism: An Unprecedented World," *Survival*, Vol. 46, No. 2, Summer 2004, pp. 143–162; Roger Brent, *Testimony Before the Subcommittee on Prevention of Nuclear and Biological Attack*, House Committee on Homeland Security, 109th Cong., 1st Sess., Washington, D.C., July 13, 2005.

biological sciences. However, none of these were linked sufficiently with the diffusion of lethal technologies to warrant our use.

Information on nuclear weapons programs is available more widely. Because of the large scale of effort required to produce fissionable material and the greater international and public attention to nuclear weapons proliferation, relatively good data do exist on which states possess deployable nuclear weapons, as well as roughly when they achieved that capability. Nuclear weapons are also unique in terms of lethality. Having a survivable nuclear deterrent places a state in a position whereby conflict with that state carries massive consequences. For all these reasons, we selected the spread of nuclear weapons as the metric to operationalize this key factor. The caveat is that trends in nuclear proliferation may not match trends projected for the diffusion of other lethal technologies. Nonetheless, nuclear proliferation is an important factor in its own right; the historical data for it are portrayed in Figure 3.10 in black.

To calculate the future baseline projection for the number of states with nuclear weapons (indicated by the gray line in the figure), we fit a power trend line to the historical data and calculated the implied future values, rounding to the whole number of states. <sup>42</sup> To determine the branch scenarios, we calculated two standard deviations above and below the baseline scenario, including more variation than the typical one standard deviation, indicated by the red and blue lines, respectively. Our review of historical cases of nuclear proliferation and analysis of potential states that may acquire nuclear weapons suggested that if future proliferation occurs it is likely to proceed in clusters. This suggested that one standard deviation would be insufficient to capture future projected variation.

<sup>&</sup>lt;sup>42</sup> The power trend line fit to the data has the equation:  $y = 0.715x^{0.6043}$ . The trend line has a very high degree of fit with the data, with an  $R^2$  of 0.95.

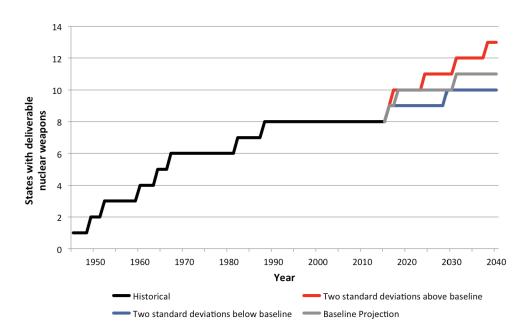


Figure 3.10. States with Nuclear Weapons

SOURCE: Historical data: Erik Gartzke, and Matthew Kroenig, "A Strategic Approach to Nuclear Proliferation," The Journal of Conflict Resolution, Vol. 53, No. 2, 2009, pp. 151–160; Hans M. Kristensen and Robert S. Norris, "Status of World Nuclear Forces," Federation of American Scientists, May 26, 2016; projections calculated by authors.

Discontinuities in the technological realm are particularly likely—but also particularly difficult to predict. Continued gains in precision-strike; advanced intelligence, surveillance, and reconnaissance; and robotics capabilities also pose the threat of future discontinuities in conflict trends. In particular, the proliferation of these capabilities to nonstate actors could make irregular warfare vastly more costly and threatening to the United States. The rapid gains in bioengineering technologies and the devastating potential of certain pathogens makes biological weapons a field particularly prone to future "shocks." Finally, the growing global dependence on cybertechnologies suggests the potential—albeit a deeply contested one—for major consequences from attacks on computing and communications infrastructure, potentially conducted by nonstate as well as state actors.

## Extent of Resource Stress Because of Population Pressures

The relationship between the extent of resource stress because of population pressures and violent conflict remains contested in the literature. Although the evidence of a direct link between such stress and interstate conflict is only weakly established, 43 some scholars have demonstrated that demographic factors (such as youth bulges) in combination with shortages of

and Climate Change, international workshop, June 2005.

 $<sup>^{43}</sup>$  Ragnhild Nordås and Nils Petter Gleditsch, "Climate Conflict: Common Sense or Nonsense," Human Security

essential resources may increase the likelihood of interstate violence.<sup>44</sup> Moreover, there is potential for this factor to gain increased importance for interstate conflict in the future as a result of climate change.<sup>45</sup>

The claim that resource stress because of population pressures causes conflict on the intrastate level is arguably stronger but remains empirically controversial. Scholars studying resource stress because of population pressures have found a link to many types of violence, including genocides, <sup>46</sup> and there is also evidence linking phenomena such as high population density, internal migration, and youth bulges with intrastate conflict. <sup>47</sup> When combined with factors such as poor governance, stagnant economies, and ethnopolitical tensions, resource stresses because of population pressures have the potential to spark violence. <sup>48</sup> State resilience to withstand or moderate the effects of such stresses will vary depending on a number of factors, including its relative capacity and socioeconomic development.

Scholars have used a variety of indicators as proxies for the extent of resource stress because of population pressures, including low endowments of natural resources, high population density, and demographic bulges. Given the diversity of plausible metrics, we operationalized this factor in two different ways. First, although the historical link between violent conflict and resource stress because of population pressures is tenuous, a stronger link could be expected in instances where resource shortages begin to have an impact on the basic survival needs of a population—for example, through access to sufficient food or potable water. We therefore used data that records the percentage of the global population that does not receive the minimum necessary

<sup>&</sup>lt;sup>44</sup> Nazli Choucri and Robert C. North, "Lateral Pressure in International Relations: Concept and Theory," in Manus I. Midlarsky, ed., *Handbook of War Studies*, Ann Arbor, Mich.: University of Michigan Press, 1989, pp. 289–326; B. A. Thayer, "Considering Population and War: A Critical and Neglected Aspect of Conflict Studies," Philosophical transactions of the Royal Society of London, Series B, *Biological Sciences*, Vol. 364, No. 1532, October 27, 2009, pp. 308–309; Katharine M. Floros, *Of, By, and For the People? How Demographic Pressure Affects Participation in Inter- and Intra-State Conflicts*, doctoral dissertation, University of Pittsburgh, 2008.

<sup>&</sup>lt;sup>45</sup> Jon Barnett, *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era*, New York, N.Y.: Zed Books, 2001.

<sup>&</sup>lt;sup>46</sup> Thomas Homer-Dixon, "Environmental Scarcities and Violent Conflict: Evidence from Cases," *International Security*, Vol. 19, No. 1, 1994, pp. 5–40; Thomas Homer-Dixon, *Environment, Scarcity and Violence*, Princeton, N.J.: Princeton University Press, 1999; Wenche Hauge and Tanja Ellingsen, "Beyond Environmental Scarcity: Causal Pathways to Conflict," *Journal of Peace Research*, Vol. 35, No. 3, 1998, pp. 299–317; Colin Kahl, *States, Scarcity, and Civil Strife in the Developing World*, Princeton, N.J.: Princeton University Press, 2006; Ole Magnus Theisen, "Blood and Soil? Resource Scarcity and Internal Armed Conflict Revisited," *Journal of Peace Research*, Vol. 45, No. 6, 2008, pp. 801–818.

<sup>&</sup>lt;sup>47</sup> Jack A. Goldstone, "Demography, Environment and Security: An Overview," in My ron Weiner and Sharon Stanton Russell, eds., *Demography and National Security*, New York, N.Y.: Berghahn Books, 2001, pp. 38–61; Jack A. Goldstone, "Population and Security: How Demographic Change Can Lead to Violent Conflict," *Journal of International Affairs*, Vol. 56, No. 1, 2002, pp. 3–21; Homer-Dixon, 1999; Richard P. Cincotta, Robert Engelman, and Daniele Anastasion, *The Security Demographic: Population and Civil Conflict After the Cold War*, Washington, D.C.: Population Action International, 2003.

<sup>&</sup>lt;sup>48</sup> Kahl, 2006; Rafael Reuveny, "Climate Change-Induced Migration and Conflict," *Political Geography*, Vol. 26, No. 6, 2007, pp. 656–673.

level of dietary energy consumption. The advantage of such a measure is that it captures the prevalence of extreme levels of resource stress because of population pressures, where human survival is directly impacted. The data come from the International Futures project, though the original source of the data is the World Resources Institute.<sup>49</sup>

We calculated the projected baseline scenario of the percentage of the global population that goes hungry using the International Futures project data. This baseline scenario is shown in Figure 3.11 in gray. We calculated the two branch scenarios using values of one standard deviation above and below the baseline trend, shown in the figure in red and blue, respectively.

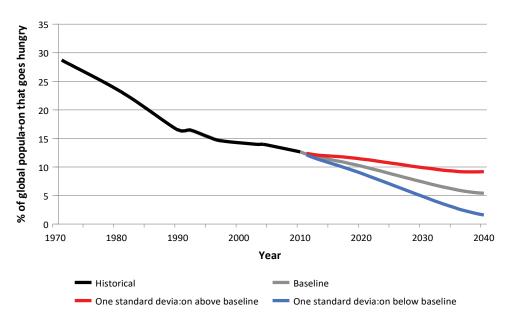


Figure 3.11. Global Population That Goes Hungry

SOURCE: Historical data: World Resources Institute, no longer available; International Futures; projections calculated by authors.

NOTE: Annual data for this metric are not available over the entire period, so the black line represents some interpolation of these missing values.

World Resources Institute Earth Trends, homepage, no longer available.

The second metric we selected for this key factor was whether a state had a youth bulge in its population age structure. Although this metric does not directly incorporate a measure of resource stress, we expect demographic bulges such as this to correlate with an increase in resource stress because of population pressures. Our data determining whether a country was experiencing a youth bulge come from the UN Population Division, and records whether the ratio of a country's 15- to 29-year-old population to its entire population over the age of 15 exceeds 45 percent. The historical data on the prevalence of youth bulges is shown in Figure 3.12 in black.

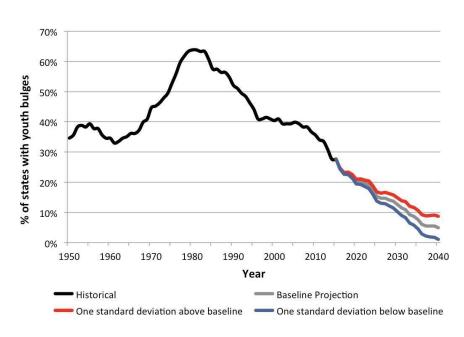


Figure 3.12. Prevalence of Youth Bulges

SOURCE: United Nations, 2015; International Futures; projections calculated by authors.

<sup>&</sup>lt;sup>50</sup> United Nations, Department of Economic and Social Affairs, Population Division, *World Population Prospects: The 2015 Revision*, 2015. This definition of a youth bulge comes from the International Futures project.

We determined the baseline scenario for the prevalence of youth bulges in Figure 3.12, portrayed by the gray line in the figure, using the International Futures model. We determined the branch scenarios by calculating one standard deviation above and below the baseline scenario, shown in the figure in red and blue, respectively.

Sharp, discontinuous changes in the level of resource stress because of population pressures from the above projections are unlikely by 2040, but possible. One plausible scenario would be a sharp increase in resource stresses caused by future climate change. Such stresses would likely affect developed and developing countries differently, with developing countries being more significantly disadvantaged—although, again, such a scenario is unlikely in the time period in question. Scholars also sometimes argue for a feedback loop between resource stresses and violence, such that increases in conflict levels as a result of other factors could themselves increase resource stresses as scarce resources are destroyed or diverted because of conflict, with the resulting increase in resource stress having a multiplying effect on conflict levels.

## Summary of Key Factors

The ten key factors discussed in this chapter are those identified in our literature review as having the strongest effect on the prevalence of interstate and intrastate conflict. The data used to operationalize each factor suggest that most, though not all, of these factors will have a negative effect on the prevalence of violent conflict in the future. We present a summary of the likely effects of each key factor in Table 3.1. This table includes three types of information:

- 1. the name of each key factor and the metrics employed to operationalize it.
- 2. our assessment of the literature evaluating each factor's effect on the prevalence of interstate and intrastate conflict. (For example, higher capacity of state institutions would be expected to reduce the prevalence of intrastate conflict [dark green] while lower capacity of state institutions would be expected to increase the prevalence of intrastate conflict [red]. In the event that the literature suggests a more contingent effect, codings of slightly less or slightly more conflict are used. If the literature does not identify a clear or consistent link between a factor and a given type of conflict, then the relationship is coded as having no effect.)
- 3. our expectation of the most likely effect each factor will have on interstate and intrastate conflict out to 2040. (These expectations are based on a combination of the future projections for each key factor presented in this chapter with our assessments of each factor's effect on the prevalence of interstate and intrastate conflict based on our literature review. In Chapter Five, we build on these expectations to identify alternative futures.)

**Table 3.1. Summary of Key Factors** 

	Metric(s) Used for Factor Projections	Effect of Level of Factor on Conflict Based on Literature Review				Expected Effect on Conflict Based on Factor Projections	
	Conflict:	Interstate	Interstate	Intrastate	Intrastate	Interstate	Intrastate
Factor	Level:	High	Low	High	Low		
Capacity of state institutions	Percentage of states where less than 50 percent of population has access to improved water source						77
Prevalence of consolidated democracies	Percentage of states with a score of 8 or higher on the Polity index					44	
Degree of ethnic and sectarian polarization	Percentage of states where at least 5 percent of the population are formally discriminated against						77
Rate of economic growth	Annual rate of global GDP growth; percentage of states with GDP/capita greater than USD\$10,000						77
Extent of economic interdependence	Global trade flows as a percentage of global GDP					44	
Degree of U.S. preeminence	U.S. GDP as a percentage of global GDP; Ratio of U.S. GDP to GDP of second-largest economy					<b>^</b>	
Capabilities of international organizations	UN peacekeeping budget					44	
Strength of international norms	Percentage of states with multiple multilateral treaty commitments to pacific dispute settlement					מע	77
Diffusion of lethal technology	Number of states with nuclear weapons					<b>个个</b>	<b>^</b>
Extent of resource stress because of population pressures	Percentage of global population that does not receive minimum necessary daily calories; percentage of states with youth bulges						<b>↓</b> ↓
	Less conflict Slightly less conflict	lo effect	Slightly mo	re conflict	More cor	flict	'

<sup>↑↑</sup> denotes factors that are expected to lead to a greater incidence of conflict in the future

denotes factors that are expected to lead to a lower incidence of conflict in the future, but with some downside risk that could eliminate or even reverse these declines

 $ullet\Psi$  denotes factors that are expected to lead to a lower incidence of conflict in the future

The projections for eight of the ten key factors suggest that they are most likely to decrease the prevalence of violent conflict in the future, although in half of those cases, the data do suggest substantial uncertainty, and the effects may apply to either interstate or intrastate conflict but not both. Only two of the ten key factors, the degree of U.S. preeminence and the diffusion of lethal technology, are expected to increase the prevalence of violent conflict in the future. In the case of U.S. preeminence, this stems from our expectation that the degree of U.S. preeminence is most likely to decline in the future. In contrast, we expect the diffusion of lethal technology to increase in the future.

The aggregate effect of all of the key factors on future conflict levels cannot be directly determined by the information in Table 3.1. The effect of each key factor is not necessarily of the same magnitude. How to determine the most likely future conflict levels, considering both historical conflict trends and the key factor projections, is discussed in the next chapter.

## 4. Establishing the "No Surprises" Future

#### Introduction

In addition to summarizing how violent conflict has changed since the end of World War II, data on past conflict trends can also be used to generate projections about future conflict. These projections can take many forms. First, we can generate baseline projections of the likely incidence and intensity of future conflict. Baseline projections assume that conflict in the future will continue to follow whatever trend line has characterized its incidence in the past, and so project this same line into the future. Baseline projections are a useful way to conceptualize and map out how future levels and intensities of conflict may evolve if there are no changes and no surprises. They provide a frame of reference against which analysts can investigate the effects of shocks or events that may make conflict more or less likely, or that would cause the actual level of conflict to deviate sharply from current patterns.

However, because they do not allow for possible or probable changes at the global, regional, and national levels, these baseline projections should not be considered as predictions of the level of conflict in the future. Specifically, the assumption that the world will look the same in the future as it did in the past—the assumption on which baseline futures rely—is almost certainly not an accurate one. Instead, even without an external shock that forces the trend in conflict above or below its baseline, changes in key determinants of conflict, discussed in detail in Chapter Three, are likely to have implications for the level or intensity of conflict. More accurate baseline projections, therefore, may require the integration of trends in the underlying key factors and consideration of how these trends are likely to affect conflict levels. We stress that the purpose of establishing a baseline future, and doing it while taking into account the interrelations between the key factors, is part of an analytical exercise meant to establish an initial projection for purposes of thinking about the range of variation from the baseline and the factors that might lead to that variation.

In this chapter, we develop four baseline conflict projections in which we examine expected future trends for the incidence and intensity of interstate and intrastate conflict. To do so, we first identify relevant historical periods from which to extrapolate future trends. We use 1970–2015 to construct our interstate baseline projections and 1989–2015 to construct our intrastate conflict baseline projections. Second, we assess alternative functional forms that best approximate historical conflict patterns and produce plausible future projections. Finally, we undertake sensitivity analyses to evaluate how expected future trends in the ten key factors presented in Chapter Three affect our four baseline conflict projections. Overall, our baseline conflict projections suggest that the incidence and intensity of interstate and intrastate conflict are likely to decline further between 2016 and 2040, even taking into account the recent uptick in intrastate

conflict, noted in Chapter Two. Accounting for projected trends in the ten key factors that influence the likelihood of conflict further strengthens these expected conflict trends.

## Defining Baseline Projections: Methodology and Considerations

Our quantitative baseline projections use data from the MEPV database, described in Chapter Two. As a reminder, this database scores the level of interstate and intrastate conflict in each country in each year on a scale of one to ten. We generated baseline conflict projections for interstate and intrastate violence, both overall and for violence at high, medium, and low intensities, as defined using our typology presented in Chapter Two. We used the MEPV data because they take the most comprehensive approach to collecting and coding violence and, thus, might offer a more complete assessment of trends in violence than other data sets. As we noted in Chapter Two, the various data sets we used revealed largely similar trends in violence over the 1946–2015 period, so our projections would be similar regardless of the data set we choose for projection.

#### Empirical Considerations

#### Selecting a Projection Time Period

The development of a baseline projection based on current trends requires a number of empirical considerations. First, we had to select the period that would be used to specify the trend line and make the projection. We considered four alternatives. First, we looked at the entire period, from 1946 to 2015. Second, we considered the period since 1970, a date we use to indicate the approximate end of decolonization and the solidification of the modern state system. Third, we looked at the period since the end of the Cold War. Finally, we considered only the post—September 11, 2001, period. Each of the latter two periods is often described as exhibiting a fundamentally different type of conflict than in previous decades. In the case of the Cold War, the argument is that the collapse of the Soviet Union and the shift to a unipolar world altered the calculation of state and nonstate actors and affected both the likelihood and incidence of conflict. Similarly, the September 11 attacks may have a similar effect on trends in conflict driven by a more proactive U.S. role and use of multilateral interventions.

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<sup>&</sup>lt;sup>1</sup> Marshall, 2016.

<sup>&</sup>lt;sup>2</sup> The use of the year 1970 is somewhat arbitrary. The great postwar wave of decolonization had begun two decades earlier, and the very last colonies gained independence after 1970 (e.g., Portugal's African colonies). Nonetheless, only a few outlying colonies gained their independence after our cut-point, making a later date unnecessary, while the pace of decolonization remained relatively rapid through the late 1960s. Thus, 1970 is a useful approximation. Moreover, we considered other cut-points in the 1960s and 1970s. The trend lines generated by looking at these alternate cut-points were often extremely similar to the 1970 cut-point, but were also often without a theoretical justification. We rejected possible cut-points for which trend lines seemed implausible and where we could not explain why a given year should serve as a cut-point for the time series in question. We offer additional details in this chapter on why we selected the cut-points that we did.

This decision about time is complicated by the fact that the trend line will vary with the period considered. Figures 4.1 through 4.4 offer some insight as to why this might be the case, using the intrastate conflict time series and a linear trend. For the purpose of this discussion, we use only the trend in intrastate conflict, but later in the chapter, we will generate trend lines for both interstate and intrastate conflict. Because the trend line effectively summarizes patterns in the incidence of conflict over the chosen period, its slope and even shape will vary as the period itself (and the conflicts included) changes. In Figure 4.1, the increase in intrastate conflict during the 1970s and 1980s leads to an upward sloping trend line that clearly does not reflect the more recent trend since 1989. Figures 4.2 and 4.3 have downward sloping trend lines but with different slopes and levels. The total amount of intrastate conflict projected by Figure 4.2 is far above what is forecast in Figure 4.3. Figure 4.3 also shows the most rapid decline in intrastate conflict, because it includes the sharp drop in intrastate violence since the end of the Cold War. Figure 4.4 shows a flat trend line, predicting no change in intrastate conflict between 2001 and 2040.

For our analysis, the choice of time period is also substantively important. The baseline projection is based on the assumption that "past trends" in conflict are likely to continue in the future. However, the level and intensity of conflict has varied significantly over the period considered. Our choice of period implies that we consider that time to have the most relevant "past trend." If we choose the full period 1946–2015, this suggests that we believe that the underlying drivers of conflict are the same throughout that time. If we choose a shorter period, for example the post–Cold War period, this suggests that we believe the drivers of conflict are fundamentally different after the end of the Cold War and that only the trend since 1989 is relevant to our overall projection.

Figure 4.1. Projection Periods and Trend Lines: Countries with Ongoing Intrastate Conflicts, 1946 – 2040

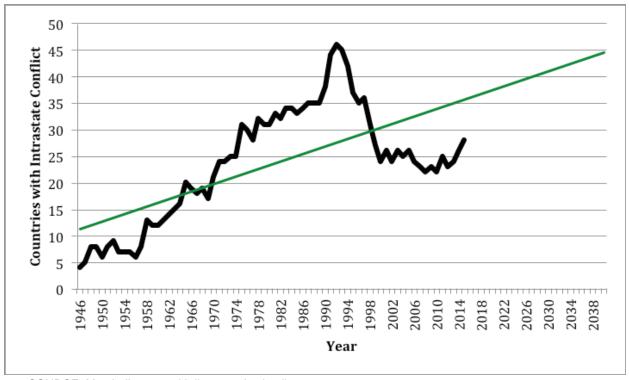


Figure 4.2. Projection Periods and Trend Lines: Countries with Ongoing Intrastate Conflicts, 1970–2040

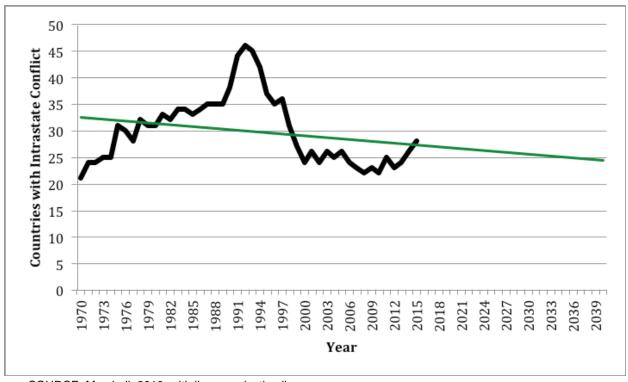


Figure 4.3. Projection Periods and Trend Lines: Ongoing Intrastate Conflicts, 1989 –2040

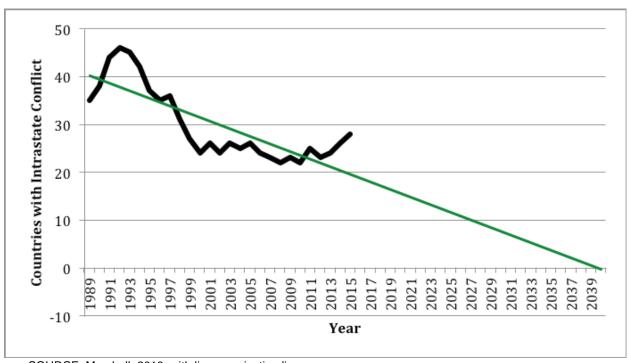
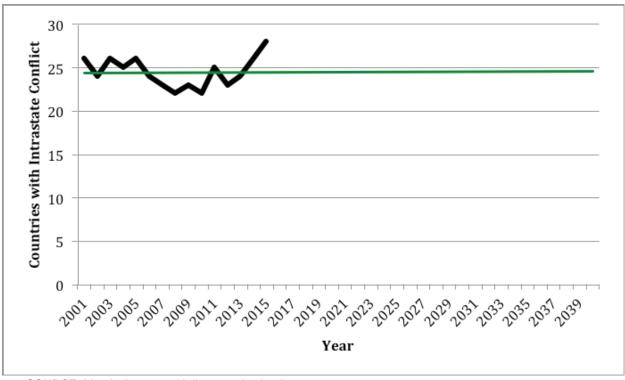


Figure 4.4. Projection Periods and Trend Lines: Countries with Ongoing Intrastate Conflicts, 2001 – 2040



#### Choosing a Functional Form

In addition to time period, the development of meaningful trend lines and baseline projections requires a choice of functional form. Figure 4.5 compares a number of different trend lines for the intrastate conflict time series and illustrates the importance of choosing an appropriate functional form. Different forms often suggest fundamentally different future conflict projections. The linear and exponential trend lines in this case suggest that total intrastate conflict will increase in the future. As already noted, this is driven by the high level of conflict in the 1980s and the fact that the trend line identifies an average or summary view of the data over the entire period. These upward sloping lines clearly do not reflect trends in conflict since 1989. The polynomial (in this case a parabola) trend line does a much better job of capturing both the global trend in the data and the more clearly downward sloping recent trend, but proceeds rapidly to zero when projected beyond 2015, also an unrealistic assessment of how future levels of conflict are likely to develop. As we chose functional forms for the trend lines used in this report, we considered simple linear trends, as well as parabolic, exponential, logarithmic, and higher-order polynomial functions.

80 70 Countries with Intrastate Conflict 60 Number of Countries with Intrastate Conflict 50 Linear (Number of Countries with Intrastate Conflict) 40 Expon. (Number of Countries 30 with Intrastate Conflict) Poly. (Number of Countries 20 with Intrastate Conflict) Log. (Number of Countries with Intrastate Conflict) 0 9461 986 9661 2006 2016 2021 2026 2031 2036 2001 2011 996 1991 1981 1971 Year

Figure 4.5. Comparing Functional Forms for Trend Lines, Countries with Ongoing Intrastate Conflicts, 1946–2040

SOURCE: Marshall, 2016, with authors' projection lines.

#### Choice of Trend Lines

Ultimately, we chose the trend line based on data since 1989 for intrastate conflict, while for interstate conflict we used the time period since 1970. The fact that the two forms of conflict have different "optimal" projection windows reflects the fact that each type of conflict has its own set of relevant factors and has followed a rather distinct trend since 1946. Interstate violence has experienced a longer and more complete decline in frequency and intensity compared with intrastate violence, while intrastate conflict reached a peak in 1989 and remains at somewhat higher levels.

Although we chose different periods in each case, we followed a similar set of criteria in making these decisions. In each case, the choice of trend line was based on a qualitative understanding of how conflict has evolved since World War II, combined with our observations from graphs similar to those in Figures 4.1 through 4.5. We considered Figures 4.1 through 4.5 along with a similar set of charts for interstate conflict. For both interstate and intrastate violence, we found that the trend line going back to 1946 was the least useful for generating projections, simply because the amount of conflict has varied greatly since 1946. As a result, any single trend line, regardless of functional form, is a relatively poor approximation of the total violence in a given year. As shown in Figure 4.5, the 1946 trend lines also make unrealistic

projections that go sharply to zero (for certain functional forms) within the next ten to 15 years or that suggest an even more unlikely increase in total conflict as a baseline future.<sup>3</sup> Conflict may increase in the future, but such a shift would require a shock or systemic change and thus is not a plausible baseline projection. Similarly, while we expect conflict to continue to decline in the future, it seems unrealistic to expect the virtual elimination of conflict by 2020 or 2025. We also found the trend lines that use data only since 2001 to be relatively unhelpful.

We chose 1970 as the cut-point for interstate conflict because it marks the beginning of the "modern" interstate system, post-decolonization. This is important for several reasons. First, the characteristics of independent states were very different before and after decolonization. Prior to decolonization, independent states were disproportionately wealthy and capable, and were located in Europe, the Americas, and Northeast Asia; after decolonization, independent states became a truly global phenomenon, exhibiting a much wider range of capabilities and other characteristics that the literature suggests may correlate with the likelihood of conflict. Second, the likelihood of recolonization after 1970 becomes extremely small, reducing the relevance of interstate conflict trends drawn from before this point. We recognize that including data from before 1970 would provide us some additional relevant observations, but would also cloud the data with all of the dynamics of colonialism that existed prior to this point. Furthermore, we conducted a number of robustness tests, using cut-points in the 1960s and later 1970s. In general, the associated trend lines using years close to 1970 were similar and those going back much further in time were implausible. Thus, we chose 1970 as an appropriate cut-point that also had a theoretical justification on which we could rely. Finally, the 1970 cut-point also accords well with longer-term trends in all drivers of interstate conflict, which suggested a reduced likelihood of violence.

On the intrastate side, we chose 1989 and not 1970 as the cut-point for several reasons. The most significant rationale has to do with the role of proxy conflicts during the Cold War. These proxy involvements significantly inflamed the likelihood of intrastate conflict during this period. It is only after these involvements ended, after the Cold War, that the most relevant trend going forward can be seen. The 1989 cut-point also marked the beginning of the post–Cold War era and a shift in the drivers, nature, and intensity of intrastate conflict. Following the break-up of the Soviet Union, competition between the two superpowers disappeared as a driver of proxy wars and a catalyst of revolution and civil war. After this point, intrastate wars also became less frequent and less intense, especially as former communist states and Soviet-successor states consolidated and democratized, and what conflict remains is more often characterized by sectarian and ethnic tensions. A strong argument can also be made for using 1970, the milestone we have chosen to mark the approximate end of the colonial period. As demonstrated in Figures

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<sup>&</sup>lt;sup>3</sup> As alluded to earlier, these unrealistic extremes emerge as the trend line tries to summarize or average across all data points. If the time interval includes a single large spike in violence, this may be enough to pull certain trend lines upward and imply an increase in conflict in the future. Similarly, if the interval considered has a steep decrease in conflict, even if limited in duration, the trend line may head rapidly to zero.

4.2 and 4.3, however, there is, in practice, little difference in the trend lines generated using these two different cut-points.

To choose functional form after selecting our projection time period, we started with simple functional forms, linear and exponential models, before moving to more-complicated possible trend line specifications, including polynomial, logit, and poisson functions. We assessed trend lines based on how well they "fit the data," or how closely they track the actual level of conflict observed in the past. In general, we found that more-complicated trend lines did not perform significantly better than simpler ones and often performed significantly worse. As a result, we relied on linear and exponential functions for our trend and projection lines, using whichever fit the data best. Once we had chosen the functional form, the generation of a baseline was relatively easy and involved only extending the trend line into the future, to the year 2040, which was our desired projection window.

# Interstate and Intrastate Baseline Projections: Interpretation and Observations

Figures 4.6 through 4.13 show the baseline conflict trends and projections, as well as the actual conflict data that underlie them. We generated these projections for interstate and intrastate conflict at each intensity level (low, medium, and high, as defined in our typology) and total number of interstate and intrastate conflicts in each year. It is worth noting that the trends are similar regardless of the type of conflict or the intensity considered. All follow a generally downward trend, and none indicate a sharp increase in conflict. Of course, even when interpreted purely as trend lines, the assumption is that the level of conflict would fluctuate on an annual basis and fall above the projection in some years and below these projections in others. In fact, the aggregated conflict graphs illustrate the difficulty of specifying a trend line that actually does closely fit the data. This challenge is likely to continue in the future and we can expect that conflict will continue to vary around our projected trend lines. In the following figures, the dotted black line illustrates our projected level of violence for each baseline.

We show four figures for interstate and intrastate violence. The first one in each case shows the time series, trend, and baseline projection for the total number of conflicts for the period considered, 1970–2040 for interstate conflict and 1989–2040 for intrastate conflict. The full trend line for the entire period is in purple and the dotted line illustrates the projection. The dotted line and the purple line overlap during the projection period (2016–2040), reflecting the fact that the projection and the trend line extended past 2015 are one and the same. There are brief periods where the two lines do not overlap in many cases, where we connect the current level of conflict to the projected trend line. The next three figures show the time series and projections (but not the full trend line, for the sake of simplicity) for the number of interstate and intrastate conflicts at each intensity level, with intensity defined based on battle deaths and

described in Chapter Two.<sup>4</sup> The individual-intensity figures effectively disaggregate the total conflict into categories based on level of violence. In each of these, the dotted lines are the baseline projections. Thus, Figure 4.6 shows the overall interstate trends and projections, Figure 4.7 shows the high-intensity interstate conflict trends and projections, Figure 4.8 portrays the medium-intensity interstate conflicts, and Figure 4.9 indicates the low-intensity interstate conflicts.

On the interstate side, total conflict shows a continued decline in both the incidence and the intensity of conflict through 2040. The figures generated for each intensity level suggest that violence will decrease at all levels, but perhaps more quickly in some cases than others. For example, the projections suggest that low-intensity interstate conflict could actually decline at the most rapid rate in the future. As noted in Chapter Two, medium- and low-intensity interstate conflict remain somewhat more likely than high-intensity conflict, but even these forms of interstate conflict are likely to fall close to zero in the future.

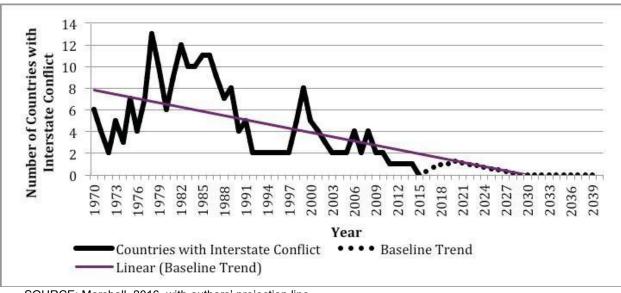


Figure 4.6. Number of Countries with Interstate Conflicts Past and Future, 1970 -2040

SOURCE: Marshall, 2016, with authors' projection line. NOTE: Equation for trend line: y = -0.1523x + 8.4493.

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<sup>&</sup>lt;sup>4</sup> As a reminder, minimum-intensity conflicts have fewer than 25 battle deaths per year, low-intensity conflicts have 25 to 999 battle deaths per year, medium-intensity conflicts have 1,000 to 99,999 battle deaths per year, and high-intensity conflicts are those with more than 100,000 battle deaths per year.

Figure 4.7. Number of Countries with Interstate Conflicts Past and Future, High Intensity, 1970 – 2040

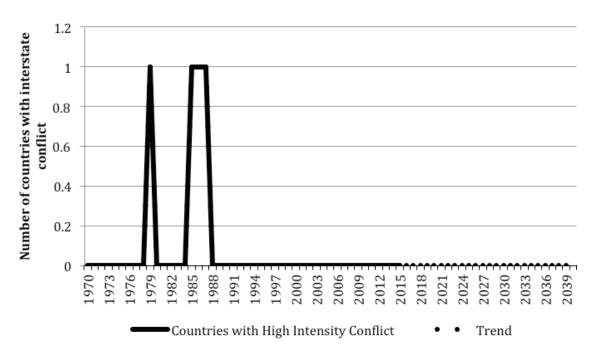
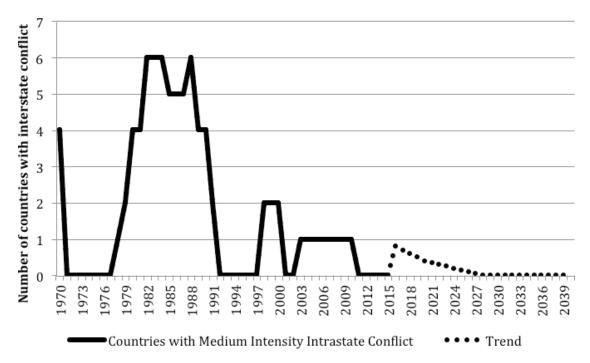
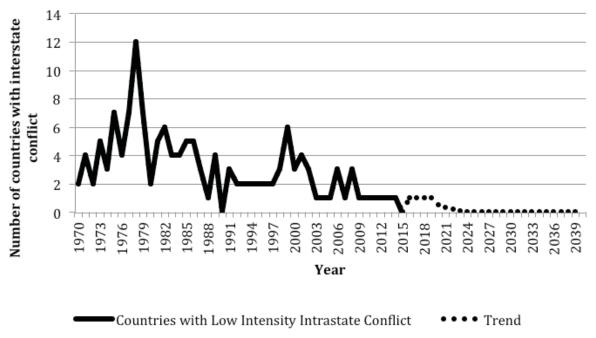


Figure 4.8. Number of Countries with Interstate Conflicts Past and Future, Medium Intensity, 1970 – 2040



SOURCE: Marshall, 2013, with authors' projection line. NOTE: Equation for trend line: y = -0.044x + 2.743

Figure 4.9. Number of Countries with Interstate Conflicts Past and Future, Low Intensity, 1970–2040



SOURCE: Marshall, 2016, with authors' projection line. NOTE: Equation for trend line: y = -0.0842x + 5.1026

On the intrastate side, the variation across projections is more substantial. Figure 4.10 shows the overall intrastate trends and projections, Figure 4.11 demonstrates the high-intensity intrastate conflict trends and projections, Figure 4.12 portrays the medium-intensity intrastate conflicts, and Figure 4.13 shows the low-intensity ones. The graph of total countries involved in intrastate conflict suggests a gradual decline from almost 30 countries in 2015 to about ten by 2040. It is worth noting that this downward trend exists despite the uptick in violence observed in recent years. This is a significant decline, but one that could be reversed by any number of shocks or changes within the international system. Our baseline projections for individual intensity levels suggest that high-intensity intrastate violence may decline to nearly zero over the next 20 or so years. Medium-intensity intrastate violence is also projected to decline, but the slope of this line is somewhat shallower and the decline less complete. Based on this projection, we can still expect to see about six countries involved in medium-intensity conflicts remaining by 2040. Finally, our baseline projection for low-intensity intrastate conflict suggests a small decline in this type of conflict between 2016 and 2040. The graph suggests that we may see about seven or eight countries still involved in remaining low-intensity intrastate conflicts by

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<sup>&</sup>lt;sup>5</sup> The reader is reminded that these projections are "no surprise" predictions, rather than forecasts that take into account the shocks or events likely to trigger conflict in the future.

2040 as well. This trend largely matches the observations made in Chapter Two, that low-intensity intrastate conflict may not follow the aggregate global decrease, at least initially, and may continue to be a security concern.

Interestingly, the total projected conflict remaining by 2040 according to our individual graphs and that which emerges from the total conflict projection in Figure 4.10 imply slightly different overall levels. Again, this is because each trend line is based on a different set of data and thus will have a different slope and trajectory. As already noted, trend lines are just that, and the true value may fall in a range around this line. Taking all four graphs together suggests that by 2040, between six and 16 countries may still be experiencing some form of conflicts—a substantial decrease from the level today in either case, but still higher than the projected total for interstate violence alone.

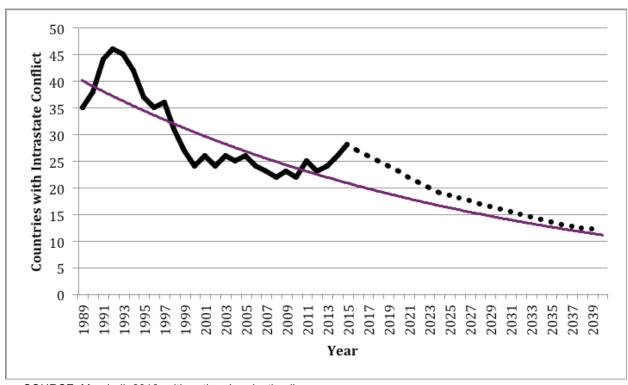
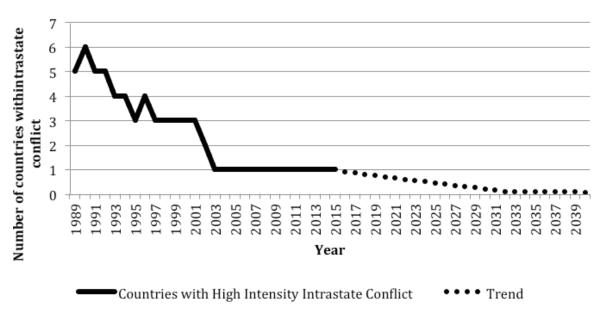


Figure 4.10. Number of Countries With Intrastate Conflicts Past and Future, 1989 -2040

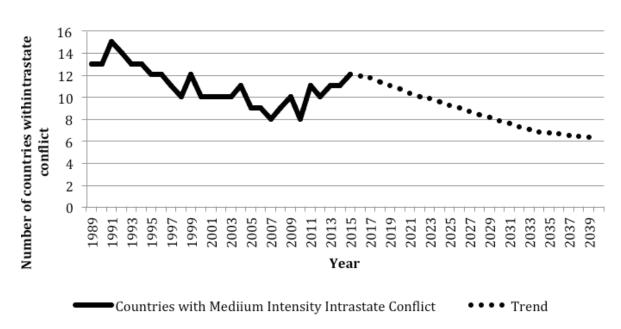
SOURCE: Marshall, 2016, with authors' projection line. NOTE: Equation for trend line:  $y = 41.169e^{-0.025x}$ .

Figure 4.11. Number of Countries with Intrastate Conflicts Past and Future, High Intensity, 1989 – 2040



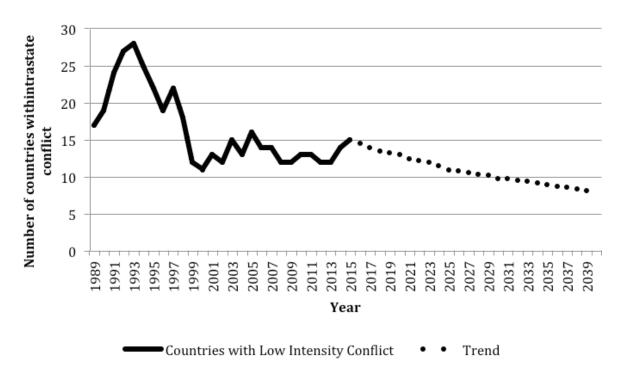
SOURCE: Marshall, 2016, with authors' projection line. NOTE: Equation for trend line:  $y = 6.0472e^{-0.081x}$ .

Figure 4.12. Number of Countries with Intrastate Conflicts Past and Future, Medium Intensity, 1989–2040



SOURCE: Marshall, 2016, with authors' projection line. NOTE: Equation for trend line:  $y = 12.987e^{-0.013x}$ .

Figure 4.13. Number of Countries with Intrastate Conflicts Past and Future, Low Intensity, 1989 – 2040



SOURCE: Marshall, 2016, with authors' projection line. NOTE: Equation for trend line:  $y = 22.617e^{-0.026x}$ .

# Adjusting Baseline Conflict Projections for Key Factors

## Baseline Projections and Key Factors

As noted earlier, our projections are based only on past trends in total conflict and essentially assume that the key factors underlying the incidence and intensity of conflict do not change over the projection period. However, even in the absence of significant shocks that cause dramatic changes in the determinants of conflict likelihood and intensity, we expect that the key factors driving the level of conflict (as discussed in detail in the previous chapter) will change in the future because each will follow its own projected trend. For example, we expect that the prevalence of democracies in the international system will continue to increase, the economic interdependence will increase, and that U.S. preeminence will trend downward (albeit slowly). As these changes occur, they should affect trends in conflict as well, pushing the baseline conflict projection up or down relative to the original projection. To generate more accurate baseline conflict projections, we need to incorporate these key factor trends into our analysis.

## Sensitivity Analyses

To adjust the baseline projections to account for the expected trends in underlying key factors that affect conflict, we conducted a set of sensitivity analyses that relied on vector autoregression (VAR), a statistical technique that can model dynamic associations among multiple variables. We can use these models to develop some relative sense of which key factors might be more or less important to conflict levels and to assess how a change in one key factor might affect our baseline projection of conflict. We use the results of these analyses to adjust our original baseline projections to account for projected trends in the underlying key factors.

Importantly, the system of equations used by the VARs is linear, which is not ideal for our analyses because they make use of event count data (number of conflicts). This is especially true of the interstate conflict models, where the counts are often very low and where there are many zeros. Instead of linear models, poisson or negative binomial models are usually used for event count data. To address this mismatch between data type and functional form, we experimented with a simple log-transformation of the dependent variable—the number of ongoing conflicts—and then used this transformed variable in the VAR models. The results of this analysis were, however, nearly identical in substantive interpretation to the VAR models using the untransformed variables. As a result and for ease of interpretation (and because we are using this for sensitivity analyses only), we use the untransformed VARs to assess the relative importance of the different key factors and to adjust the trend lines accordingly.

To gain insights from the VAR models, we considered the effect of each key factor on the level of conflict independent of the other variables, using the regression model. We used the results to estimate the change in conflict incidence that would occur following an increase in each key factor, as well as the percentage of this change attributable to the key factor. These two tests allowed us to rank key factors according to their contribution to conflict levels and also to approximate the total effect of baseline changes in the key factors on the baseline conflict projection, specifically in terms of the total decline in conflict observed over the projection period. We then adjusted the original baseline by this total effect, generating an updated "adjusted" projection line. We also include confidence intervals for this adjusted line. The confidence intervals are based on two different projections of the underlying key factors,

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<sup>&</sup>lt;sup>6</sup> It uses a "systems of equations" approach to measure how changes in one variable may simultaneously affect other variables included within the model. It is especially useful for measuring the effects of a shock or change in one variable on others, in terms of size, timing, and duration. John R. Freeman, John T. Williams, and Tse -min Lin, "Vector Auto Regression and the Study of Politics," *American Journal of Political Science*, 1989, pp. 842–877; Patrick Brandt and John Freeman, "Advances in Bayesian Time Series Modeling and the Study of Politics: Theory Testing, Forecasting, and Policy Analysis," *Political Analysis*, Vol. 14, 2006, pp. 1–36.

<sup>&</sup>lt;sup>7</sup> Given data limitations and a relatively small number of observations (compared with the number of key factors), we cannot use the VAR models for a rigorous multivariate statistical analysis with robust quantitative results.

<sup>&</sup>lt;sup>8</sup> In technical terms, we used the impulse response functions and forecast error variance generated by our regression models. The change in key factors is a one-time increase of one standard deviation.

including a set associated with a possible higher conflict future and a set associated with a lower conflict future.

Figures 4.14 through 4.17 show these adjusted projections, along with the original baselines, for four conflict time series: the total number of countries experiencing interstate and intrastate conflicts per year using the MEPV data and the aggregate intensity of interstate and intrastate conflict, calculated by summing the violence index scores for all countries for each year recorded in the MEPV data. Figure 4.14 presents the VAR-adjusted data and projections until 2040 for incidence of interstate conflict. Figure 4.15 does the same for intrastate conflict. Figure 4.16 shows the VAR-adjusted data and projections until 2040 for aggregate conflict intensity for interstate conflict. Figure 4.17 does the same for intrastate conflict.

While the total conflict figures (4.14 and 4.15) focus on the magnitude of conflict, the second set (Figures 4.16 and 4.17) provide a measure of the overall intensity of violence within the global system. Each graph shows a number of lines. The black solid line represents the actual time series of conflicts in the past. The black dotted line represents our original projection. The red dotted line is the VAR-adjusted trend and the gray dotted lines represent the high- and low-confidence intervals.

As shown in Figures 4.14 through 4.17, our adjustments to the projection lines were relatively small and in the downward direction, suggesting a lower level of total conflict projected in 2040 than the initial projection. This result occurs because the trends in the underlying key factors associated with conflict appear to be moving in a direction that favors a greater and more rapid reduction in conflict than a baseline prediction based on historical data. For the interstate graphs, the downward adjustment to the incidence of conflict graph in Figure 4.14 suggests virtually no remaining violent interstate conflict, and reinforcing the overall finding of a downward trend. While the adjusted line suggests zero interstate conflicts going forward, the confidence interval suggests that the number of interstate conflicts may vary between zero and two. We do not expect a systematic increase in interstate conflict, but note that interstate conflict may not be eradicated and may still spring up from time to time. The VARadjusted trend for aggregate intensity (Figure 4.16) similarly trends toward zero by 2040. Even taking such projections at face value, the trend does not mean the absence of other forms of conflict, including crises that do not escalate to war, shows of military force, and hostile economic or political actions. Again, we stress that this projection is a baseline trend conducted as part of our analytical exercise, not a prediction of the extent of future conflict.

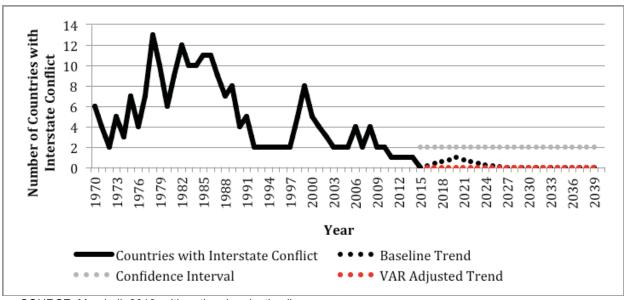
For the intrastate conflict graphs, the adjustment further lowers the baseline projection, suggesting lower levels of violent intrastate conflict than our original projection in terms of the number of countries involved in conflict and the total intensity of those conflicts. The VAR-adjusted line shows a small decrease in the amount of conflict as compared with the baseline

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<sup>&</sup>lt;sup>9</sup> We could not perform the VAR analyses effectively on the individual data series for each level of conflict because of our relatively small sample and data limitations on key factors.

projection. However, the confidence interval for the adjusted intrastate conflict projection does fall above the original projection line. If intrastate conflict were to fall toward the upper edges of this region, it would represent a slight increase in the number of countries involved in intrastate conflicts. However, reaching this level would require a slowing in some of the conflict-reducing trends we have observed recently, such as an increase in democracy and global GDP as well as the spread of international norms. Also notable is the extent of the reduction in total conflict intensity on the intrastate side projected by VAR-adjusted trend between 2016 and 2040. This projection suggests a future in which low-intensity intrastate violence may be all that remains. Furthermore, even the upper boundary of the confidence interval falls below the baseline projection, suggesting a more certain decrease in intensity of conflict in the future, even if some number of individual conflicts remains. On the other hand, it could be that these trends understate future conflict intensity or that the recent downward trend in intensity will slow, plateau, or reverse. We explore the range of possible conflict futures in more detail in later chapters of this report.

Figure 4.14. Number of Countries with Interstate Conflicts Past and Future, VAR -Adjusted Trend in Number of Countries Experiencing Conflict, 1970–2040



SOURCE: Marshall, 2016, with authors' projection line.

Figure 4.15. Number of Countries with Intrastate Conflicts Past and Future, VAR-Adjusted Trend in Number of Countries Experiencing Conflict, 1989–2040

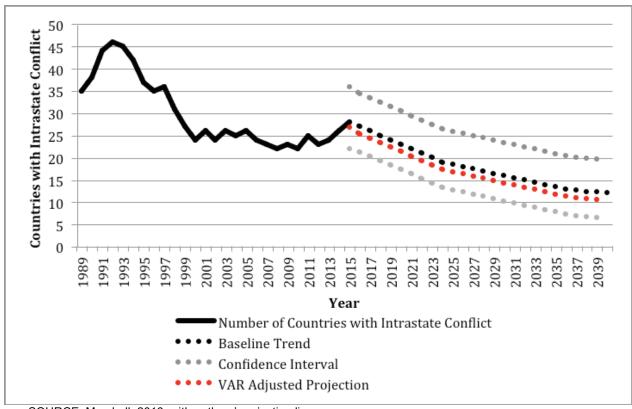
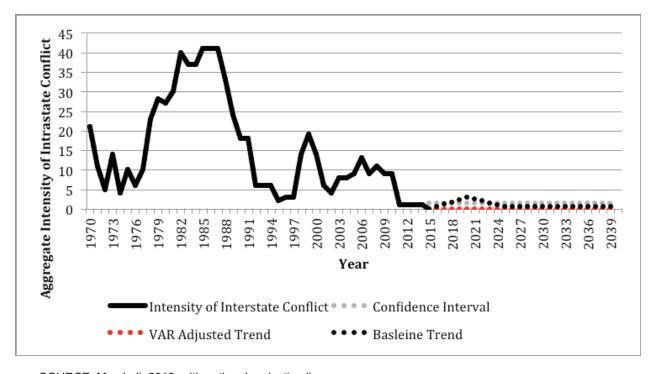


Figure 4.16. Ongoing Interstate Conflicts Past and Future, VAR-Adjusted Trend in Aggregate Intensity, 1970–2040



180 Aggregate Intensity of Intrastate 160 140 120 100 Conflict 80 60 40 20 0 2009 2013 2015 2017 2019 2021 2001 2003 2005 2007 2011 Year Intensity of Intrastate Conflicts • • • • Baseline Trend Confidence Interval VAR Adjusted Trend

Figure 4.17. Ongoing Intrastate Conflicts Past and Future, VAR-Adjusted Trend in Aggregate Intensity, 1989–2040

Together, the VAR analyses suggest that the net effect of baseline changes in the key factors (that is, the changes that would occur if they continue to follow their "expected" trends) will be to reduce both the incidence and intensity of conflict. The sensitivity analyses also identify those key factors that seem to have a particularly important relationship with future conflict, either in terms of incidence or intensity. These factors, the direction of their trend, and the direction of the effect suggested by the VAR analysis are listed in Table 4.1.

Several observations are relevant. First, a different set of key factors appears to affect each type of conflict, and different factors matter for the projection of incidence and intensity. For example, measures of ethnic and sectarian tensions appear to matter only for intrastate conflict, while technological diffusion matters only for interstate conflict. However, there are certain factors that appear to matter across outcome variables. For example, the prevalence of democracy and measures of U.S. preeminence affect both interstate and intrastate conflict incidence and, in the case of preeminence, also intensity. The rate of economic growth affects interstate intensity and incidence as well as incidence for intrastate conflict. The capabilities of international organizations seem to matter only for the intensity of conflict, but they are relevant on both the interstate and intrastate sides.

Table 4.1. Key Factors That Affect Baseline Projections

Key Factor	Outcome Variable	Direction of Key Factor Trend	Effect on Conflict, According to the Sensitivity Analysis
Prevalence of consolidated democracy	Incidence of intrastate conflict	Increase in factor	Decreases conflict
Degree of U.S. preeminence		Decrease in factor	Increases conflict
Rate of economic growth		Increase in factor	Decreases conflict
Degree of ethnic and sectarian polarization		Decrease in factor	Decreases conflict
Prevalence of consolidated democracy	Incidence of interstate conflict	Increase in factor	Decreases conflict
Degree of U.S. preeminence	interestate commet	Decrease in factor	Increases conflict
Rate of economic growth		Increase in factor	Decreases conflict
Diffusion of lethal technology		Increase in factor	Increases conflict
Prevalence of consolidated democracy	Aggregate intensity of	Decrease in factor	Decreases conflict
Degree of U.S. preeminence	intrastate conflict	Decrease in factor	Increases conflict
Rate of economic growth	initiastate conflict	Increase in factor	Decreases conflict
Degree of resource stress from population pressure		Decrease in factor	Decrease in conflict
Prevalence of consolidated democracy	Aggregate	Increase in factor	Decreases conflict
Rate of economic growth	intensity of	Increase in factor	Decreases conflict
Degree of economic interdependence	interstate conflict	Increase in factor	Decreases conflict
Diffusion of lethal technology		Increase in factor	Increases conflict

# Summary: What Do Our Baseline Projections Imply About Future Conflict?

Our baseline projections of future conflict suggest a further decline in incidence and intensity of interstate and intrastate conflict between 2016 and 2040. This is true of the aggregated trends, as well as trends in conflict at each level of intensity (high, medium, and low). The one exception is the trend for low-intensity intrastate conflict, which appears to increase between 2013 and 2015 before resuming its downward trend. Baseline projections of conflict incidence suggest that a smaller number of conflicts will remain by 2040 and those that do remain are most likely to be intrastate. Projections for intensity suggest that what conflict does remain will fall into lower-and middle-intensity categories. Trends for high-, medium-, and low-intensity conflict support both observations. The VAR-adjusted trend lines suggest further reduction in conflict because of trends in our identified key factors. The sensitivity analyses also identified certain key factors as being more important to future trends in conflict than others. These included the prevalence of democracy, U.S. preeminence, and economic growth as well as, on the intrastate side, ethnic and sectarian tensions and resource stress and, on the interstate side, the diffusion of lethal technology.

Although the baseline projection in future conflict is a useful starting point for a discussion about future conflict incidence and intensity, the baseline projection is limited in a number of ways. First, significant variations in the level of conflict over time and levels of conflict in the past that are substantially higher than those in the future make it difficult to fit trend lines that consistently fall near the observed level of conflict. As a result, actual conflict numbers and intensity at any given time are expected to deviate from the projection, even if the expected downward trend takes place.

Second, our analytical exercise in coming up with the baseline trends assumes that key variables remain mostly the same and that there are no significant changes, shocks, or shifts that might affect overall levels of conflict in the future. Even the adjusted trend lines consider only baseline changes in the key factors—that is, changes that will occur if the factors follow their current trajectory. As we note repeatedly, the purpose of this exercise is to establish an "expected future" baseline for thinking about conflict incidence and intensity as a first step toward an understanding of what might change the baseline. We understand that in the next quarter century there will be unexpected changes or shocks to the current geopolitical, economic, demographic, or social character of the international system that will affect the incidence, nature, and intensity of conflict and that have the potential to cause more significant and sustained shifts from our projected baseline. The possible causes and implications of these types of changes and shocks are discussed in the next two chapters of this report.

Finally, the quantitative baselines provide less insight into questions about where conflict is most likely to occur, which countries are most likely to be involved, and the catalysts that are most likely to trigger it. This is largely a function of our data, which focus on total number of conflicts at the global level and do not focus on regional effects or reasons for the conflict. A more disaggregated model could also incorporate these dimensions, generating baseline futures by region or conflict catalyst.

## 5. Alternative Futures

## Introduction

Chapter Four presented our baseline future projection, which points to further decline of the incidence and intensity of interstate and intrastate conflict between 2016 and 2040. As we have noted repeatedly, the baseline projection is a useful starting point for a discussion about conflict incidence and intensity in the future, but divergence from the baseline projection is likely, in fact it is to be expected. As a result, the baseline conflict trend is not the only future to take into account by military planners. Planners need to understand alternative futures as well.

Developing a range of alternative futures walks a fine line between identifying too few futures to be useful and too many futures to be usefully managed. For the purposes of our project, we developed an exploratory analysis tool to assess the extent to which projected changes in our key factors affect our future conflict trend expectations. The tool includes a set of 1,160 futures based on combinations of up to three future changes in our key factors. For each future, the tool identifies future signposts to watch for, expected causal relationships between each key factor and conflict, and visual displays of key factor projections. To make this range of futures manageable for planners, the tool includes an accessible user interface for scenario building. We present a brief overview of the alternative futures tool in the next section, and we discuss the tool in more detail, including signposts and combinatorial rules, in Appendix B. Upon request, project staff will make the tool available to authorized recipients. In this chapter, we assess the alternative futures most prone to interstate and intrastate conflict identified through this exploratory analysis tool and discuss alternatives for conflict mitigation within each alternative future.

#### Alternative Futures Tool

The alternative futures tool allows users to assess the impact of alternative trends in up to three key factors on future conflict trends. Taken together, the range of three key factor changes from their baseline projections produces 1,160 alternative futures. These futures represent all possible combinations of above or below baseline trend changes in up to three of the key factors identified in Chapter Three. This includes 20 alternative futures in which only one key factor differs from its baseline projection, 180 futures in which two key factors are different from their baseline projections, and 960 futures in which three key factors are different from their baseline projections. For each of the 1,160 alternative futures, the tool includes:

- signposts to identify changes in each key factor
- projected trends for each key factor

- the expected effect of each key factor change on interstate and intrastate conflict trends
- overall interstate and intrastate conflict trends expectations.

This tool has a variety of potential applications. It incorporates our assessment of conflict trends and our analysis of the causes of conflict. As a result, the tool provides empirically and theoretically grounded expectations of future conflict. As an Excel-based program, it captures an enormous amount of data and causal relationships in a simple, user-friendly format that provides much easier and faster access to information than would a series of reports or technical appendixes. Its organization allows users without extensive background knowledge to make use of empirical conflict research.

We envision a number of uses for the tool. As an exploratory analysis tool, it can facilitate scenario development and the assessment of potential operating environments for military planners and analysts. By providing a user-friendly format for viewing a wide range of alternative futures, it provides a basis for discussions within the intelligence community. By providing clear, straightforward and jargon-free statements about future signposts, expected causal relationships between each key factor and conflict, and visual displays of key factor projections, the tool enables informed communication about conflict expectations with external audiences. By using Excel as our programming platform, we built the tool in a package that is available to almost every computer user.

Figure 5.1 presents an overview of the user interface for the tool. In the upper left section, users select up to three key factors to evaluate, based on pull-down menus that list the ten key factors. For each selection, the user also selects whether to evaluate changes in each key factor that are above or below their projected baseline values.<sup>1</sup>

The upper middle and right sections provide information on what to expect about each key factor if it were to vary from its baseline projection. For each key factor selected, the upper middle section displays what signposts to watch for that would signal a change in the key factor. The upper right section displays the most likely range of variation above or below baseline expected based on historical patterns for each key factor (as discussed in Chapter Three).

The lower sections report assessments about how the selected changes in key factors affect interstate and intrastate future conflict expectations individually and in combination. All of the assessments are based on changes from the baseline expectation that the incidence and intensity of interstate and intrastate conflict are likely to decline further between 2016 and 2040. The first row (in blue) contains the interstate conflict expectations. The second row (in brown) contains the intrastate conflict expectations. The box on the far left in each row is the overall conflict trend expectation, while the three boxes on the right are the individual effects of each key factor change on future conflict expectations.

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<sup>&</sup>lt;sup>1</sup> All of the values are set at 'NONE' for the visual display shown in Figure 5.1 so that the text can be read. A screenshot with three factors selected is displayed in Appendix B.

Figure 5.1. Overview of the Alternative Futures User Interface

## **Alternative Conflict Futures Exploratory Analysis Tool** Signpost for Each Key Factor Projected Future Trends for Each Key Factor Choose up to three key factors: Key Factor #1 NONE None NONE Direction of change Below Baseline NONE Key Factor #2 None NONE Direction of change Below Baseline Key Factor #3 NONE None NONE Direction of change Below Baseline **Overall Conflict Expectations** Individual Effect of Each Key Factor on Expectation of Conflict vis-à-vis Baseline Conflict Expectation Effect on Interstate Conflict (Relative to Baseline Conflict Expectation) **Expectation for Interstate Conflict** NONE NONE NONE **Effect on Intrastate Conflict Expectation for Intrastate Conflict** NONE NONE NONE

We used the exploratory analysis tool to identify combinations of key factor trends that may contribute to more conflict than is projected in our baseline conflict trends. Of the 1,160 alternative futures included in the tool, we project more interstate conflict than in our baseline projection in 244 futures, and more intrastate conflict in 226 futures. We discuss the most important key factor combinations that contribute to a greater likelihood of interstate and intrastate conflict and possibilities for their mitigation in the next two sections.

#### Alternative Interstate Conflict Futures

As the baseline conflict expectation presented in Chapter Four demonstrates, the trend in interstate conflict is toward less conflict, particularly with respect to high- and medium-intensity conflicts. However, the baseline interstate conflict projection is only one of many possible futures. Alternative trends in the ten key factors that influence conflict could lead to more or less conflict than is predicted in the baseline projection. In this section, we identify alternative futures that embody both greater and lower expectations of future interstate conflict. We then "reverse history" to consider what can be done to prevent higher-conflict futures and promote lower-conflict futures. Our focus is on understanding the specific conditions under which the trends toward less conflict might not hold and on the countervailing conditions that might alleviate some of the more conflict-prone futures.

## Key Factors Influencing Interstate Conflict

Based on our literature review, interstate conflict is least likely to occur in environments that have strong systemic characteristics that deter conflict and have few triggers that might spark conflict. Conversely, conflict is most likely to occur in environments that have weak structural deterrents and many sources of dissatisfaction. We identified five key system-wide factors that influence the level of interstate conflict deterrence based on our review of theoretical and empirical studies of conflict. These key factors are:

- prevalence of consolidated democracies
- extent of economic interdependence
- strength of international norms
- capabilities of international organizations
- degree of U.S. preeminence.

Each of these factors influences the expected incidence of conflict differently. Greater prevalence of consolidated democracies increases the number of countries in the system that favor the use of nonviolent conflict resolution mechanisms and have political systems with domestic accountability. Increased economic interdependence can increase the opportunity cost of conflict by increasing the economic gains that states would forgo during interstate conflict. International norms can reduce the legitimacy of conflict, while strong international

organizations can enforce international norms and agreements, increasing the probability and extent of punishment that countries in conflict might face from other countries. A preeminent global power such as the United States can use its influence to discourage conflict between lesser powers.

Not all of these conditions must exist to create an international system that deters conflict. Moreover, these structural systemic factors need not co-vary. The pre—World War I "Hundred Years' Peace" was characterized by a preeminent world power (Great Britain) and a high degree of economic interdependence, but lacked the undergirding of international organizations, the prevalence of democracies, and had much weaker international norms against interstate conflict.

For the short- to medium-term future, our baseline projections suggest that the prevalence of consolidated democracies, the extent of economic interdependence, the strength of international norms and the capabilities of international organizations will continue to increase, while the degree of U.S. preeminence will decline. In an environment of declining U.S. preeminence, and in the absence of another global power willing to undertake a conflict deterrence role, a systemic deterrence effect will depend on the strength of alternative pacifying forces.

This is most likely to occur through two channels. First, a reduction in the attractiveness of conflict as a mechanism for dispute resolution could reduce the likelihood that states would turn to interstate violence. This can occur with a high prevalence of consolidated democracies and high international economic interdependence. Second, an increase in the international punishments that exist for engaging in interstate conflict would increase the costs associated with interstate violence. This can occur as a result of strong international norms against conflict that are enforced by highly capable international organizations.

Conflict incidence is also affected by factors that generate dissatisfaction among actors, thus, actors "demand" interstate dispute resolution generally, and conflict as a dispute resolution mechanism more specifically. With respect to interstate conflict, we highlight two key factors that can affect the number of interstate disputes: rate of economic growth and degree of ethnic and sectarian polarization.

An increase in ethnic and sectarian polarization or a decline in the global rate of economic growth is unlikely to cause a large increase in the incidence of interstate conflicts in an international environment with strong conflict deterrent characteristics. But these factors could serve as triggers for interstate conflict in an international system with weak conflict deterrence capabilities. This may be exacerbated with greater access to weapons through greater diffusion of lethal technology.

Building on our analyses of the ten key factors influencing interstate conflict presented in Chapter Three and summarized in Table 3.1, we identify the expected magnitude and direction of changes in our projection of future interstate conflict based on changes in each of the key factors. Table 3.1 presented our assessment of each factor's effect on the prevalence of interstate conflict based on our extensive literature review. We use these results as our expectations for how changes in each key factor above or below its projected baseline will alter the baseline interstate

conflict projection presented in Chapter Four. We present this framework in Table 5.1. For each factor, we identify whether an above-baseline projection or a below-baseline projection of the key factor is likely to contribute to more conflict, slightly more conflict, less conflict, or slightly less conflict than in our baseline conflict projections, or have no effect.

Table 5.1. Expected Effect of Key Factor Changes on Interstate Conflict Trends Relative to RAND Conflict Projections

	Expected Effect of Change in Factor from Baseline		
Key Factors	Above Baseline	Below Baseline	
Capacity of state institutions			
Prevalence of consolidated democracies			
Degree of ethnic and sectarian polarization			
Rate of economic growth			
Extent of economic interdependence			
Degree of U.S. preeminence			
Capabilities of international organizations			
Strength of international norms			
Diffusion of lethal technology			
Extent of resource stress because of population pressures			
Less conflict Slightly less conflict No eff	ect Slightly more conflict	More conflict	

Key factor changes that we expect to contribute to more conflict are coded red; for example, we expect a decline in the prevalence of consolidated democracies to contribute to more interstate conflict. Key factor changes that we expect to contribute to slightly more conflict are coded orange; we expect an increase in ethnic and sectarian polarization to contribute to slightly more interstate conflict. Conversely, key factors that we expect to contribute to less conflict and slightly less conflict are coded dark green and light green, respectively. We expect a greater prevalence of consolidated democracies to contribute to less conflict, while greater economic growth should contribute to slightly less conflict. Finally, we coded key factor changes that we do not expect to affect the baseline conflict project white (e.g., changes in the capacity of state institutions should not affect interstate conflict).

## Interstate Conflict-Prone Futures and Their Mitigation

Taking together all of the key factor changes that we expect might increase the future incidence of interstate conflict, Table 5.2 outlines the futures most prone to interstate conflict. Since it is unlikely that all eight of the key factor changes identified in Table 5.2 would occur concurrently, we focus in this section on the three factor changes that we expect can most

strongly contribute to increased interstate conflict: declining U.S. preeminence, declining capabilities of international organizations, and declining prevalence of consolidated democracies.

Table 5.2. Key Factor Changes That Create the Most Interstate Conflict-Prone Future

Key Factor	Direction of Change from Baseline Expectation	
Prevalence of consolidated democracies	Below baseline	
Degree of ethnic and sectarian polarization	Above baseline	
Rate of economic growth	Below baseline	
Extent of economic interdependence	Below baseline	
Degree of U.S. preeminence	Below baseline	
Capabilities of international organizations	Below baseline	
Strength of international norms	Below baseline	
Diffusion of lethal technology Above baseline		

All three factors affect the systemic strength of interstate conflict deterrence. For each of these three factors, we examine how their interaction with one or two other key factor changes contributes to a greater propensity for or amelioration of interstate conflict. All of the futures discussed in this section were identified through the alternative futures exploratory analysis tool.

Furthermore, declining U.S. preeminence may be the most likely to occur, but its effects can be mitigated through strengthening alternative sources for systemic conflict deterrence, such as increasing the prevalence of consolidated democracies or economic interdependence. Of the three factors, a decline in prevalence of consolidated democracies could be least likely to occur but would be most difficult to offset, as the only conflict-mitigating factor that our assessment of the conflict literature identified as comparable in strength to its decline is an increase in economic interdependence. However, the prevalence of consolidated democracies and economic interdependence has tended to co-vary. Thus, we find it unlikely that economic interdependence will increase in a future in which the prevalence of consolidated democracies is decreasing.

## Declining U.S. Preeminence May Increase Interstate Conflict

A rate of decline in U.S. preeminence that is larger than projected in our baseline conflict trend is one of three key factor changes that are sufficient individually to lead to an expectation of more interstate conflict (see Table 5.1). Declining U.S. preeminence weakens conflict deterrence in the international system. In particular, we expect that declining U.S. preeminence may increase the propensity for interstate conflict by weakening other actors' expectations that the United States will intervene in interstate conflicts.

This effect will be exacerbated if other key factors that underpin the current international system's propensity to deter conflict—such as the prevalence of consolidated democracies, the extent of economic interdependence, the capabilities of international organizations or the

strength of international norms—also weaken. Similarly, lower U.S. preeminence may lead to greater conflict if interstate conflict triggers, such as ethnic and sectarian polarization or low economic growth, become more prevalent. In conjunction with any of these changes, greater diffusion of lethal technology will increase actors' ability to access deadly force.

## Interstate Conflict-Prone Futures with Declining U.S. Preeminence

Table 5.3 lists 28 alternative futures in which declining U.S. preeminence is coupled with other key factor changes to increase future conflict expectations. Each of these futures is a more conflict-prone alternative to the baseline conflict projection presented in Chapter Four. These futures highlight trends for military planners to watch out for because they may signal a break in the current trend toward less interstate conflict.

Table 5.3. Key Factor Combinations Involving Declining U.S. Preeminence and Other Key Factors

That Lead to an Expectation of More Interstate Conflict

#### **Declining U.S. Preeminence Plus One Other Key Factor Change:**

Declining prevalence of consolidated democracies

Declining economic interdependence

Declining strength of international norms

Declining capabilities of international organizations

Increasing ethnic and sectarian polarization

Declining rate of economic growth

Increasing diffusion of lethal technology

#### **Declining U.S. Preeminence Plus Two Other Key Factor Changes:**

Declining prevalence of consolidated democracies, declining economic interdependence

Declining prevalence of consolidated democracies, declining strength of international norms

Declining prevalence of consolidated democracies, declining capabilities of international organizations

Declining prevalence of consolidated democracies, increasing ethnic and sectarian polarization

Declining prevalence of consolidated democracies, declining rate of economic growth

Declining prevalence of consolidated democracies, increasing diffusion of lethal technology

Declining economic interdependence, declining strength of international norms

Declining economic interdependence, declining capabilities of international organizations

Declining economic interdependence, increasing ethnic and sectarian polarization

Declining economic interdependence, declining rate of economic growth

Declining economic interdependence, increasing diffusion of lethal technology

Declining strength of international norms, declining capabilities of international organizations

Declining strength of international norms, increasing ethnic and sectarian polarization

Declining strength of international norms, declining rate of economic growth

Declining strength of international norms, increasing diffusion of lethal technology

Declining capabilities of international organizations, increasing ethnic and sectarian polarization

Declining capabilities of international organizations, declining rate of economic growth

Declining capabilities of international organizations, increasing diffusion of lethal technology

Increasing ethnic and sectarian polarization, declining rate of economic growth

Increasing ethnic and sectarian polarization, increasing diffusion of lethal technology

Declining rate of economic growth, increasing diffusion of lethal technology

Mitigating Interstate Conflict in Futures with Declining U.S. Preeminence

The increased expectation of interstate conflict associated with declining U.S. preeminence can be offset in futures in which other key factors that help to deter interstate conflict are strengthened and conflict triggers do not worsen. In these cases, the weakening of interstate conflict deterrence created by declining U.S. preeminence is offset by strengthening other interstate conflict deterrence drivers.

In each of the nine alternative futures included in Table 5.4, either an increase in the prevalence of consolidated democracies or an increase in economic interdependence is necessary to offset declining U.S. preeminence. These two systemic sources of interstate conflict deterrence are the strongest conflict-mitigating factors we identified through our review of the literature and empirics on interstate conflict. Although mitigating sources of interstate dissatisfaction (e.g., through greater economic growth or reduced ethnic and sectarian polarization) will help reduce the propensity of interstate conflict, such changes do not appear as important to long-run conflict mitigation as strengthening systemic conditions for conflict deterrence. Of course, the best-case scenarios for ameliorating the increased propensity for interstate conflict that might result from declining U.S. preeminence are those that involve both stronger deterrence and weaker conflict triggers.

Table 5.4. Alternative Futures Involving Declining U.S. Preeminence That Lead to a Baseline Conflict Expectation or Better

#### Declining U.S. Preeminence Plus One Other Key Factor Change:

Increasing prevalence of consolidated democracies

Increasing economic interdependence

## **Declining U.S. Preeminence Plus Two Other Key Factor Changes:**

Increasing prevalence of consolidated democracies, increasing economic interdependence

Increasing prevalence of consolidated democracies, increasing strength of international norms

Increasing prevalence of consolidated democracies, increasing capabilities of international organizations

Increasing prevalence of consolidated democracies, increasing economic growth

Increasing economic interdependence, increasing strength of international norms

Increasing economic interdependence, increasing capabilities of international organizations

Increasing economic interdependence, increasing economic growth

Overall, we expect declining U.S. preeminence in the medium term to increase the propensity for interstate conflict, as fewer countries are deterred from engaging in conflict, through either declining expectations of U.S. support or declining concerns over U.S. opposition. This effect will be exacerbated if other key factors that help deter interstate conflict weaken (e.g., prevalence of consolidated democracies, extent of economic interdependence, capabilities of international organizations, strength of international norms), or if countries' conflict triggers increase (e.g., degree of ethnic and sectarian polarization, rate of economic growth). Conversely, the effect of

declining U.S. preeminence can be mitigated by strengthening alternative systemic factors that can deter interstate conflict, as long as interstate conflict triggers do not also increase.

A caveat is in order. It is important to note that, with respect to declining U.S. preeminence, more interstate conflict globally does not necessarily translate into more interstate disputes involving the United States. Whether the United States intervenes in interstate conflicts depends on U.S. foreign policy and strategic interests.

## Declining Capabilities of International Organizations May Increase Interstate Conflict

As we discuss in Chapter Three, we expect the capabilities of international organizations to continue to strengthen over time. We expect that if the capabilities of international organizations strengthen at a slower pace than projected in our baseline conflict trend, or decline absolutely, the incidence of interstate conflict may become more likely (see Table 5.1).

International organizations can strengthen systemic conflict deterrence by spreading norms of pacific international behavior, undertaking peacekeeping missions, and providing venues for negotiating the resolution of interstate disputes. As a result, a decline in the capabilities of international organizations, and hence a diminution in the dispute mitigation activities that international organizations undertake, is expected to increase the propensity for interstate conflict.

This effect will be exacerbated if other key factors that underpin the current international system's propensity to deter conflict—such as the degree of U.S. preeminence, the prevalence of consolidated democracies, the extent of economic interdependence, and the strength of international norms—also weaken, or if interstate conflict triggers—such as ethnic and sectarian polarization and poor economic growth—become more prevalent. In conjunction with any of these changes, greater diffusion of lethal technology will increase actors' ability to access deadly force.

Interstate Conflict-Prone Futures with Declining Capabilities of International Organizations

Table 5.5 lists 28 alternative futures in which declining capabilities of international organizations are coupled with other key factor changes to increase future conflict expectations. Each of these futures is a more conflict-prone alternative to the baseline conflict projection presented in Chapter Four. These futures identify potential trends for the Army to watch out for as they may signal a break in the current trend toward less interstate conflict.

Table 5.5. Key Factor Combinations Involving Declining Capabilities of International Organizations and Other Key Factors That Lead to an Expectation of More Interstate Conflict

#### **Declining Capabilities of International Organizations Plus One Other Key Factor Change:**

Declining U.S. preeminence

Declining prevalence of consolidated democracies

Declining economic interdependence

Declining strength of international norms

Increasing diffusion of lethal technology

Increasing ethnic and sectarian polarization

Declining rate of economic growth

#### Declining Capabilities of International Organizations Plus Two Other Key Factor Changes:

Declining U.S. preeminence, declining prevalence of consolidated democracies

Declining U.S. preeminence, increasing ethnic and sectarian polarization

Declining U.S. preeminence, declining rate of economic growth

Declining U.S. preeminence, increasing diffusion of lethal technology

Declining U.S. preeminence, declining economic interdependence

Declining U.S. preeminence, declining strength of international norms

Declining prevalence of consolidated democracies, declining economic interdependence

Declining prevalence of consolidated democracies, declining strength of international norms

Declining prevalence of consolidated democracies, increasing ethnic and sectarian polarization

Declining prevalence of consolidated democracies, declining rate of economic growth

Declining prevalence of consolidated democracies, increasing diffusion of lethal technology

Declining economic interdependence, declining strength of international norms

Declining economic interdependence, increasing ethnic and sectarian polarization

Declining economic interdependence, declining rate of economic growth

Declining economic interdependence, increasing diffusion of lethal technology

 $\label{lem:condition} \mbox{Declining strength of international norms, increasing ethnic and sectarian polarization}$ 

Declining strength of international norms, declining rate of economic growth

Declining strength of international norms, increasing diffusion of lethal technology

Increasing ethnic and sectarian polarization, declining rate of economic growth

Increasing ethnic and sectarian polarization, increasing diffusion of lethal technology

Declining rate of economic growth, increasing diffusion of lethal technology

In addition to the 28 futures described in Table 5.5, there are five more futures involving declining capabilities of international organizations in which we expect more interstate conflict (Table 5.6). These futures include one key factor change that would slightly decrease conflict expectations (e.g., declining ethnic and sectarian polarization) and a second factor that contributes to a greater expectation of conflict (e.g., declining U.S. preeminence). In combination, we expect that the slight conflict mitigation embodied in the first key factor change

will be more than offset by the combination of the second key factor change and declining capabilities of international organizations.

Table 5.6. Alternative Futures Involving Declining Capabilities of International Organizations, One Key Factor Contributing to Less Conflict and One Key Factor Contributing to More Conflict That Lead to an Expectation of More Interstate Conflict

Increasing U.S. preeminence, declining prevalence of consolidated democracies
Increasing economic growth, declining U.S. preeminence
Increasing economic growth, declining prevalence of consolidated democracies
Increasing strength of international norms, declining prevalence of consolidated democracies
Increasing strength of international norms, declining U.S. preeminence

Mitigating Interstate Conflict in Futures with Declining Capabilities of International Organ izations

The greater systemic propensity for interstate conflict caused by declining capabilities of international organizations can be offset in futures in which other key factors that help to deter interstate conflict are strengthened and conflict triggers do not worsen. In these cases, the weakening of interstate conflict deterrence created by declining capabilities of international organizations is mitigated by strengthening other interstate conflict deterrence drivers.

In each of the nine alternative futures included in Table 5.7, either an increase in the prevalence of consolidated democracies or an increase in economic interdependence is necessary to offset declining capabilities of international organizations. Although a reduction in conflict triggers would also help reduce the incidence of interstate conflicts, our analysis suggests that they may be insufficient for reducing conflict in the medium to long term in an interstate system that lacks structural conflict deterrents.

Table 5.7. Alternative Futures Involving Declining Capabilities of International Organizations That

Lead to a Baseline Conflict Expectation or Better

# Declining Capabilities of International Organizations Plus One Other Key Factor Change: Increasing prevalence of consolidated democracies

Increasing economic interdependence

#### Declining Capabilities of International Organizations Plus Two Other Key Factor Changes:

Increasing prevalence of consolidated democracies, increasing economic interdependence Increasing prevalence of consolidated democracies, increasing strength of international norms Increasing prevalence of consolidated democracies, increasing U.S. preeminence Increasing prevalence of consolidated democracies, increasing economic growth Increasing economic interdependence, increasing strength of international norms Increasing economic interdependence, increasing U.S. preeminence Increasing economic interdependence, increasing economic growth

It is important to note that increasing U.S. preeminence on its own does not appear to be sufficient to counteract declining capabilities of international organizations. This reflects the limits on the degree to which U.S. preeminence can plausibly be expected to increase in the medium term (discussed in Chapter Three), and highlights the importance of working with international partners, particularly through international organizations, to ensure more pacific international outcomes.

Overall, we expect declining capabilities of international organizations in the medium term to increase the propensity for interstate conflict as there will be fewer conflict-mitigating activities undertaken in the interstate system. This effect will be exacerbated if other key factors that help deter interstate conflict weaken, or if key factors that increase countries' conflict triggers increase. Conversely, the effect of declining capabilities of international organizations can be mitigated by strengthening alternative systemic factors that can deter interstate conflict, as long as interstate conflict triggers do not also increase.

### Declining Prevalence of Consolidated Democracies May Increase Interstate Conflict

The pacifying effect of consolidated democracies on interstate conflict was one of the strongest and most consistent findings in the conflict literature. We expect that if the prevalence of consolidated democracies falls below our baseline projections (either increases at a lower rate than expected or declines absolutely), the incidence of interstate conflict may become more likely.

The prevalence of consolidated democracies in the interstate system affects the likelihood that states with disputes will engage in violent conflict to resolve their differences. Most democracies are characterized by norms of nonviolent conflict resolution, as well as transparent and accountable political systems that force policymakers to justify the use of violent conflict rather than alternative dispute settlement mechanisms. Reducing the percentage of democracies in the system weakens one of the sources of systemic conflict deterrence, and is expected to result in a greater incidence of interstate conflict.

This effect will be exacerbated if other key factors that underpin the current international system's propensity to deter conflict also weaken, or if interstate conflict triggers become more prevalent. In conjunction with any of these changes, greater diffusion of lethal technology will increase actors' ability to access deadly force.

Interstate Conflict-Prone Futures with Declining Prevalence of Consolidated Democracies

Table 5.8 lists 28 alternative futures in which declining prevalence of consolidated democracies is coupled with other key factor changes to increase future conflict expectations. Each of these futures is a more conflict-prone alternative to the baseline conflict projection presented in Chapter Four. These futures identify potential trends for the Army to watch out for because they may signal a break in the current trend toward less interstate conflict.

Table 5.8. Key Factor Combinations Involving Declining Prevalence of Consolidated Democracies and Other Key Factors That Lead to an Expectation of More Interstate Conflict

#### **Declining Prevalence of Consolidated Democracies Plus One Other Key Factor Change:**

Declining U.S. preeminence

Declining economic interdependence

Declining strength of international norms

Declining capabilities of international organizations

Increasing ethnic and sectarian polarization

Declining rate of economic growth

Increasing diffusion of lethal technology

#### Declining Prevalence of Consolidated Democracies Plus Two Other Key Factor Changes:

Declining U.S. preeminence, declining economic interdependence

Declining U.S. preeminence, declining strength of international norms

Declining U.S. preeminence, declining capabilities of international organizations

Declining U.S. preeminence, increasing ethnic and sectarian polarization

Declining U.S. preeminence, declining rate of economic growth

Declining U.S. preeminence, increasing diffusion of lethal technology

Declining economic interdependence, declining strength of international norms

Declining economic interdependence, declining capabilities of international organizations

Declining economic interdependence, increasing ethnic and sectarian polarization

Declining economic interdependence, declining rate of economic growth

Declining economic interdependence, increasing diffusion of lethal technology

Declining strength of international norms, declining capabilities of international organizations

Declining strength of international norms, increasing ethnic and sectarian polarization

Declining strength of international norms, declining rate of economic growth

Declining strength of international norms, increasing diffusion of lethal technology

Declining capabilities of international organizations, increasing ethnic and sectarian polarization

Declining capabilities of international organizations, declining rate of economic growth

Declining capabilities of international organizations, increasing diffusion of lethal technology

Increasing ethnic and sectarian polarization, declining rate of economic growth

Increasing ethnic and sectarian polarization, increasing diffusion of lethal technology

Declining rate of economic growth, increasing diffusion of lethal technology

In addition to the 28 futures described in Table 5.8, there are six additional futures in which we expect more interstate conflict than in the baseline conflict projection (Table 5.9). These six futures are similar to the ones in Table 5.8, in that they involve declining prevalence of consolidated democracies in combination with one other key factor change associated with increased interstate conflict incidence. They differ from the 28 futures in Table 5.8 in that they also include a third key factor change that is associated with a slight amelioration of conflict

incidence (e.g., increasing the strength of international norms). In these six conflict futures, however, the presence of one ameliorating key factor is expected to be insufficient to offset the effect of reduced democracies in conjunction with a weakening of another source of systemic conflict deterrence or an increase in sources of states' dissatisfaction.

Table 5.9. Alternative Futures Involving Declining Prevalence of Consolidated Democracies, One Key Factor Contributing to Less Conflict and One Key Factor Contributing to More Conflict That Lead to an Expectation of More Interstate Conflict

Increasing U.S. preeminence, declining capabilities of international organizations
Increasing economic growth, declining U.S. preeminence
Increasing economic growth, declining capabilities of international organizations
Increasing capabilities of international organizations, declining U.S. preeminence
Increasing strength of international norms, declining U.S. preeminence
Increasing strength of international norms, declining capabilities of international organizations

Mitigating Interstate Conflict in Futures with Declining Prevalence of Consolidated Democracies

The increased expectation of interstate conflict associated with declining prevalence of consolidated democracies can be offset when other key factors that help deter interstate conflict are strengthened and conflict triggers are less salient. However, the range of options to offset the impact of a lower percentage of democracies in the interstate system is narrower than is the case for mitigating the effects of either declining U.S. preeminence or declining capabilities of international organizations. A necessary component of each of the five futures presented in Table 5.10 is a strengthening of economic interdependence. On their own, none of the other key factors are associated with a sufficiently strong conflict-ameliorating effect to fully offset the increased conflict propensity created by a decline in the percentage of consolidated democracies in the system. In contrast, deepening economic interdependence may increase the domestic cost of interstate conflict sufficiently to substitute for the loss of democratic norms, transparency and accountability that would result from an increase in nondemocratic regimes.

Table 5.10. Alternative Futures Involving Declining Prevalence of Consolidated Democracies That Lead to a Baseline Conflict Expectation or Better

#### Declining Prevalence of Consolidated Democracies Plus One Other Key Factor Change:

Increasing economic interdependence

#### Declining Prevalence of Consolidated Democracies Plus Two Other Key Factor Changes:

Increasing economic interdependence, increasing U.S. preeminence

Increasing economic interdependence, increasing strength of international norms

Increasing economic interdependence, increasing capabilities of international organizations

Increasing economic interdependence, increasing economic growth

The importance of increased economic interdependence to offset the increased conflict propensity generated by a decline in consolidated democracies raises the concern that democratization and increased economic interdependence have generally co-varied. Erosions in the aggregate quality of democracy in the interstate system have been associated with economic closure. The Great Depression of the 1930s is an example of this pattern. Alternatively, post—World War II and post—Cold War periods of democratization have been associated with increased economic interdependence. This pattern suggests that a rise in nondemocracies in the interstate system may be a cause of increased incidence of interstate conflicts. A decline in the prevalence of consolidated democracies may be more difficult to offset than either a decline in U.S. preeminence or the capabilities of international organizations.

## Alternative Intrastate Conflict Futures

Much like the baseline conflict projection for interstate conflict, the projected trend in intrastate conflict is toward less conflict, albeit at a higher level than for interstate conflict. However, the baseline intrastate conflict projection is only one of many possible futures. Alternative trends in the ten key factors that influence conflict could lead to more or less conflict than projected in the baseline projection. In this section, we identify alternative futures that embody both greater and lower projections of future intrastate conflict. We then "reverse history" to consider what can be done to prevent higher-conflict futures and promote lower-conflict futures. Just as in the preceding section on interstate conflict futures, our focus is on understanding the specific conditions under which the trends toward less conflict might not hold and on the countervailing conditions that might alleviate some of the more conflict-prone futures.

## Key Factors Influencing Intrastate Conflict

Intrastate conflict reflects state-level vulnerabilities that create opportunities for armed conflict as well as the underlying motivations for groups within countries to engage in conflict. Although interstate factors can influence the incidence of intrastate conflict, particularly by affecting whether intrastate conflicts become internationalized through other countries' interventions, these factors play a much smaller role than is the case for interstate conflicts. This highlights the difficulty of intrastate conflict mitigation, in which the most salient factors, such as the capacity of state institutions and economic growth, must be addressed on a state-by-state basis. Intrastate conflict mitigation is further exacerbated by the co-varying nature of the factors that contribute to intrastate conflict. For example, countries with weak state institutions often suffer from weak economic growth and high ethnic or sectarian polarization.

Based on our literature review of intrastate conflict, poorly governed countries with weak state institutions are most vulnerable to conflict. In particular, our analysis identified a strong link between poverty and violence. Thus, we expect the least conflict-prone future environments to have strong state institutions, strong systemic characteristics that deter conflict, and few

triggers that might spark conflict. Conversely, intrastate conflict is most likely to occur in environments characterized by weak state institutions, many sources of dissatisfaction that might trigger conflict, and weak systemic conflict deterrents. Diffusion of lethal technology may not spark intrastate conflict, but could enable it.

Table 5.11 identifies the key factors that affect countries' vulnerability to conflict, groups' demand for intrastate conflict (e.g., conflict triggers), and level of systemic deterrence of intrastate conflict.

**Table 5.11. Key Factors That Affect Intrastate Conflict** 

#### **Factors That Affect Countries' Vulnerability to Conflict:**

Capacity of state institutions

Diffusion of lethal technology

#### **Factors That Affect Groups' Demand for Intrastate Conflict:**

Rate of economic growth

Degree of ethnic and sectarian polarization

Extent of resource stress because of population pressures

#### **Factors That Affect Systemic Deterrence of Intrastate Conflict:**

Prevalence of consolidated democracies

Strength of international norms

Capabilities of international organizations

Degree of U.S. preeminence

Building on our analyses of how our ten key factors influence intrastate conflict presented in Chapter Three and summarized in Table 3.1, we identify the expected magnitude and direction of changes in our projection of future intrastate conflict based on changes in each of the key factors. Table 3.1 presented our assessment of each factor's effect on the prevalence of intrastate conflict based on our extensive literature review. We use these results as our expectations for how changes in each key factor above or below its projected baseline will alter the baseline intrastate conflict projection presented in Chapter Four. We present this framework in Table 5.12. For each factor, we identify whether a projection of the key factor that is above or below the baseline is likely to contribute to more conflict, slightly more conflict, less conflict, or slightly less conflict than in our baseline conflict projections, or to have no effect at all.

Table 5.12. Expected Effect of Key Factor Changes on Intrastate Conflict Trends Relative to RAND Conflict Projections

	Expected Effect of Change in Factor from Baseline		
Key Factors	Above Baseline	Below Baseline	
Capacity of state institutions			
Prevalence of consolidated democracies			
Degree of ethnic and sectarian polarization			
Rate of economic growth			
Extent of economic interdependence			
Degree of U.S. preeminence			
Capabilities of international organizations			
Strength of international norms			
Diffusion of lethal technology			
Extent of resource stress because of population pressures			
Less conflict Slightly less conflict No eff	ect Slightlymore conflict	More conflict	

Key factor changes that we expect to contribute to more conflict are coded red; for example, we expect a decline in the capacity of state institutions to contribute to more intrastate conflict. Key factor changes that we expect to contribute to slightly more conflict are coded orange; we expect an increase in ethnic and sectarian polarization to contribute to slightly more intrastate conflict. Conversely, key factors that we expect to contribute to less conflict and slightly less conflict are coded dark green and light green, respectively. We expect a greater capacity of state institutions to contribute to less conflict, while increased prevalence of consolidated democracies should contribute to slightly less conflict. Finally, we coded key factor changes that we do not expect to affect the baseline conflict projection as white (e.g., increases or decreases in economic interdependence should not affect the incidence of intrastate conflict).

## Intrastate Conflict-Prone Futures and Their Mitigation

Taking together all of the key factor changes we anticipate could increase the future incidence of intrastate conflict, Table 5.13 outlines the most intrastate conflict-prone future. However, it is highly unlikely that all nine of the key factor changes identified in Table 5.13 would occur concurrently. In this section, we focus on the two factor changes that we expect could most strongly contribute to increased intrastate conflict: declining capacity of state institutions and declining economic growth.

Table 5.13. Key Factor Changes That Create the Most Intrastate Conflict-Prone Future

Key Factor	Direction of Change from Baseline Expectation	
Capacity of state institutions	Below baseline	
Rate of economic growth	Below baseline	
Degree of ethnic and sectarian polarization	Above baseline	
Degree of U.S. preeminence	Below baseline	
Prevalence of consolidated democracies	Below baseline	
Strength of international norms	Below baseline	
Capabilities of international organizations	Below baseline	
Extent of resource stress because of population pressures	Below baseline	
Degree of diffusion of lethal technology	Above baseline	

We expect that declining capacity of state institutions will reduce governments' ability to forestall conflict, while declining economic growth will increase actors' dissatisfaction with the status quo and therefore increase their desire to engage in intrastate conflict. For both factors, we examine how their interaction with one or two other key factor changes contributes to a greater propensity for or amelioration of intrastate conflict. All of the futures discussed in this section were identified through the alternative futures exploratory analysis tool.

Of particular concern for the future of intrastate conflict is the strong relationship between the strength of state institutions and the rate of economic growth. State vulnerabilities created by weak state institutions may be less likely to be exploited if societal grievances are low, as may be the case when the economy is growing. Conversely, the greater levels of societal dissatisfaction stemming from low economic growth are less likely to lead to intrastate conflict in countries with strong state institutions. At first blush, it would appear the best strategy to forestall conflict in countries with weak institutions would be to foster economic growth and to strengthen state institutions in countries with weak economic growth. However, this is the perennial problem facing development policymakers: These conditions rarely appear separately. Strong state institutions and economic growth tend to go together. It is exceedingly difficult to strengthen institutions in poor economic conditions (i.e., with no fiscal bases) and almost impossible to achieve sustainable economic growth in the absence of state institutions. This reduces the effectiveness of available options for mitigating intrastate conflict in countries with weak state institutions and low economic growth, and may in part explain the greater persistence of intrastate conflict compared with interstate conflict in the system.

## Declining Capacity of State Institutions May Increase Intrastate Conflict

The relationship between weak state institutions and intrastate conflict was one of the strongest and most consistent findings in the conflict literature. We expect that if state capacity increases at a lower rate than anticipated in our baseline projections, or declines absolutely, then

projected intrastate conflict trends will be greater than in the baseline projections presented in Chapter Four.

States with low institutional capacity are more likely to experience conflict because they are neither able to provide benefits to meet the demands of their populations nor are they able to control or stop insurgencies. This effect will be exacerbated if groups' motivations to engage in conflict increase (e.g., through increased ethnic or sectarian polarization or low economic growth), or international systemic factors that help to deter conflict weaken (e.g., declining capabilities of international organizations). In conjunction with any of these changes, greater diffusion of lethal technology will increase actors' ability to access deadly force.

#### Intrastate Conflict-Prone Futures with Declining Capacity of State Institutions

Table 5.14 lists 36 alternative futures in which declining capacity of state institutions is coupled with other key factor changes to increase future conflict expectations. Each of these futures is a more conflict-prone alternative than the baseline conflict projection presented in Chapter Four. These futures identify potential trends for military planners to watch out for as they may signal a break in the current trend toward less intrastate conflict.

Table 5.14. Key Factor Combinations Involving Declining Capacity of State Institutions and Other Key Factors That Lead to an Expectation of More Intrastate Conflict

#### **Declining Capacity of State Institutions Plus One Other Key Factor Change:**

Declining rate of economic growth

Increasing ethnic and sectarian polarization

Increasing resource stress

Declining prevalence of consolidated democracies

Declining strength of international norms

Declining capabilities of international organizations

Declining U.S. preeminence

Increasing diffusion of lethal technology

#### **Declining Capacity of State Institutions Plus Two Other Key Factor Changes:**

Declining economic growth, increasing ethnic and sectarian polarization

Declining economic growth, increasing resource stress

Declining economic growth, declining prevalence of consolidated democracies

Declining economic growth, declining strength of international norms

Declining economic growth, declining capabilities of international organizations

Declining economic growth, declining U.S. preeminence

Declining economic growth, increasing diffusion of lethal technology

Increasing ethnic and sectarian polarization, increasing resource stress

Increasing ethnic and sectarian polarization, declining prevalence of consolidated democracies

Increasing ethnic and sectarian polarization, declining strength of international norms

Increasing ethnic and sectarian polarization, declining capabilities of international organizations

Increasing ethnic and sectarian polarization, declining U.S. preeminence

Increasing ethnic and sectarian polarization, increasing diffusion of lethal technology

Increasing resource stress, declining prevalence of consolidated democracies

Increasing resource stress, declining strength of international norms

Increasing resource stress, declining capabilities of international organizations

Increasing resource stress, declining U.S. preeminence

Increasing resource stress, increasing diffusion of lethal technology

Declining prevalence of consolidated democracies, declining strength of international norms

Declining prevalence of consolidated democracies, declining capabilities of international organizations

Declining prevalence of consolidated democracies, declining U.S. preeminence

Declining prevalence of consolidated democracies, increasing diffusion of lethal technology

Declining strength of international norms, declining capabilities of internat ional organizations

Declining strength of international norms, declining U.S. preeminence

Declining strength of international norms, increasing diffusion of lethal technology

Declining capabilities of international organizations, declining U.S. preeminence

Declining capabilities of international organizations, increasing diffusion of lethal technology

Declining U.S. preeminence, increasing diffusion of lethal technology

In addition to the 36 futures described in Table 5.14, there are three additional futures that involve declining capacity of state institutions that have an expectation of more intrastate conflict (Table 5.15). These futures are less clear-cut than the ones presented in Table 5.14 because they each include one key factor change that would slightly decrease conflict expectations (e.g., strengthening international norms, declining ethnic and sectarian polarization and prevalence of consolidated democracies) and weakening economic growth, which strengthens groups'

motivations to engage in intrastate conflict. In combination, we expect that the slight conflict mitigation embodied in the first key factor change will be more than offset by the combination of increased vulnerability to conflict created by declining capacity of state institutions and increasing motivation for conflict created by low economic growth. The alternative futures included in Table 5.15 highlight our expectation that it is difficult to mitigate the increased propensity for intrastate conflict that exists in futures characterized by state vulnerabilities and significant conflict motivators.

Table 5.15. Alternative Futures Involving Declining Capacity of State Institutions, One Key Factor Contributing to Less Conflict and One Key Factor Contributing to More Conflict That Lead to an Expectation of More Intrastate Conflict

Declining ethnic and sectarian polarization, declining economic growth

Increasing prevalence of consolidated democracies, declining economic growth

Increasing strength of international norms, declining economic growth

## Mitigating Intrastate Conflict in Futures with Declining Capacity of State Institutions

The increased expectation of intrastate conflict associated with declining capacity of state institutions creates enhanced opportunities for groups in society that are dissatisfied with the status quo to engage in armed conflict as a means of achieving their preferred outcomes. The best option for conflict mitigation in the face of weak state institutions is to reduce societal groups' motivations for intrastate conflict. Based on our assessment of the conflict literature, the key conflict motivator is low economic growth. The salience of ethnic and sectarian cleavages and population pressures are second-tier concerns. Examining combinations of two and three key factor changes, Table 5.16 identifies the four alternative futures in which conflict-mitigating factors might be sufficient to offset declining capacity in state institutions. It is important to note that all four include increased economic growth.

Table 5.16. Alternative Futures Involving Declining Capacity of State Institutions That Lea d to a Baseline Conflict Expectation or Better

#### **Declining Capacity of State Institutions Plus One Other Key Factor Change:**

Increasing economic growth

#### **Declining Capacity of State Institutions Plus Two Other Key Factor Changes:**

Increasing economic growth, decreasing ethnic and sectarian polarization

Increasing economic growth, increasing prevalence of consolidated democracies

Increasing economic growth, increasing strength of international norms

Overall, lower-than-expected levels of institutional capacity generate greater intrastate conflict vulnerability. This vulnerability is most likely to lead to violence when societal demands are unmet by the government. We expect that poor economic growth is the most critical conflict trigger. If state capacity remains low, we expect that intrastate conflict will be difficult to mitigate in the absence of greater economic growth.

## Declining Rate of Economic Growth May Increase Intrastate Conflict

A lower rate of growth than in the baseline future projection is expected to increase societal dissatisfaction with the government, increasing the legitimacy of and support for insurgent groups. As a result, we expect that economic growth rates increasing at a lower-than-projected rate or declining absolutely may increase both intrastate conflict triggers and societal groups' motivations to engage in violence. This effect will be exacerbated if the capacity of state institutions is lower than projected, or if international systemic factors that help to deter conflict weaken. In conjunction with any of these changes, greater diffusion of lethal technology will increase actors' ability to access deadly force.

## Intrastate Conflict-Prone Futures with Declining Rate of Economic Growth

Table 5.17 lists 36 alternative futures in which a declining rate of economic growth is coupled with other key factor changes to increase future conflict expectations. Each of these futures is a more conflict-prone alternative to the baseline conflict projection presented in Chapter Four. These futures identify potential trends military planners should watch for because they could signal a break in the current trend toward less intrastate conflict.

## Table 5.17. Key Factor Combinations Involving Lower Economic Growth and Other Key Factors That Lead to an Expectation of More Intrastate Conflict

#### Lower Economic Growth Plus One Other Key Factor Change:

Declining capacity of state institutions

Increasing ethnic and sectarian polarization

Increasing resource stress

Declining prevalence of consolidated democracies

Declining strength of international norms

Declining capabilities of international organizations

Declining U.S. preeminence

Increasing diffusion of lethal technology

#### Lower Economic Growth Plus Two Other Key Factor Changes:

Declining capacity of state institutions, increasing ethnic and sectarian polarization

Declining capacity of state institutions, increasing resource stress

Declining capacity of state institutions, declining prevalence of consolidated democracies

Declining capacity of state institutions, declining strength of international norms

Declining capacity of state institutions, declining capabilities of international organizations

Declining capacity of state institutions, declining U.S. preeminence

Declining capacity of state institutions, increasing diffusion of lethal technology

Increasing ethnic and sectarian polarization, increasing resource stress

Increasing ethnic and sectarian polarization, declining prevalence of consolidated democracies

Increasing ethnic and sectarian polarization, declining strength of international norms

Increasing ethnic and sectarian polarization, declining capabilities of international organizations

Increasing ethnic and sectarian polarization, declining U.S. preeminence

Increasing ethnic and sectarian polarization, increasing diffusion of lethal technology

Increasing resource stress, declining prevalence of consolidated democracies

Increasing resource stress, declining strength of international norms

Increasing resource stress, declining capabilities of international organizations

Increasing resource stress, declining U.S. preeminence

Increasing resource stress, increasing diffusion of lethal technology

Declining prevalence of consolidated democracies, declining strength of international norms

Declining prevalence of consolidated democracies, declining capabilities of international organizations

Declining prevalence of consolidated democracies, declining U.S. preeminence

Declining prevalence of consolidated democracies, increasing diffusion of lethal technology

Declining strength of international norms, declining capabilities of international organizations

Declining strength of international norms, declining U.S. preeminence

Declining strength of international norms, increasing diffusion of lethal technology

Declining capabilities of international organizations, declining U.S. preeminence

Declining capabilities of international organizations, increasing diffusion of lethal technology

Declining U.S. preeminence, increasing diffusion of lethal technology

In addition to the 36 futures described in Table 5.17, there are three additional futures involving a lower rate of economic growth that have an expectation of more intrastate conflict (Table 5.18). These futures are less clear-cut than the ones presented in Table 5.17 because they each include one key factor change that would slightly decrease conflict expectations (e.g., weakening international norms, declining ethnic and sectarian polarization and prevalence of

consolidated democracies) and declining capacity of state institutions, which increases countries' vulnerability to interstate conflict. In combination, we expect that the slight conflict mitigation embodied in the first key factor change will be more than offset by the combination of increased vulnerability to conflict created by declining capacity of state institutions and increasing motivation for conflict created by low economic growth. The alternative futures included in Table 5.18 highlight our expectation that it is difficult to mitigate the increased propensity for intrastate conflict that exists in futures characterized by state vulnerabilities and significant conflict motivators.

Table 5.18. Alternative Futures Involving Lower Economic Growth, One Key Factor Contributing to Less Conflict and One Key Factor Contributing to More Conflict That Lead to an Expectation of More Intrastate Conflict

Declining ethnic and sectarian polarization, declining capacity of state institutions

Increasing prevalence of consolidated democracies, declining capacity of state institutions

Increasing strength of international norms, declining capacity of state institutions

#### Mitigating Intrastate Conflict in Futures with Declining Rate of Economic Growth

The increased expectation of intrastate conflict associated with a lower rate of economic growth stems from greater societal dissatisfaction with the status quo. The best option for conflict mitigation in the face of low economic growth is to increase capacity of state institutions to reduce governments' vulnerability to insurgency. The degree of ethnic and sectarian polarization and population pressures are second-tier concerns. Examining combinations of two and three factor changes, Table 5.19 identifies the four alternative futures in which we expect conflict-mitigating factors to be sufficient to offset declining capacity of state institutions. It is important to note that all four include increasing capacity of state institutions.

Table 5.19. Alternative Futures Involving Declining State Capacity/Governance That Lead to a Baseline Conflict Expectation or Better

#### **Declining State Capacity/Governance Plus One Other Key Factor Change:**

Increasing capacity of state institutions

#### **Declining State Capacity/Governance Plus Two Other Key Factor Changes:**

Increasing capacity of state institutions, decreasing ethnic and sectarian polarization
Increasing capacity of state institutions, increasing prevalence of consolidated democracies
Increasing capacity of state institutions, increasing strength of international norms

We identified lower-than-expected capacity of state institutions and lower-than-expected rates of economic growth as two critical potential drivers *and* mitigators of future intrastate conflict. Moreover, we expect these two key factors may co-vary. Declining economic growth will likely erode countries' governance capacity. Similarly, weak state institutions undermine governments' ability to maintain long-term economic growth. As a result, intrastate conflict may be much more difficult to offset than interstate conflict. This may help explain why the projected level of future intrastate conflict incidence is higher than interstate conflict incidence.

## Conclusion

Although the baseline projections presented in Chapter Four reflect our projection of future conflict trends, divergence from the baseline projection is likely. In this chapter, we used the Alternative Futures Tool to identify the alternative futures that embody greater expectations of future conflict and then considered what could be done to mitigate the effect of conflict drivers.

The three factors that most strongly increased interstate conflict expectations were declining U.S. preeminence, declining capabilities of international organizations, and declining prevalence of consolidated democracies. Of the three factors, we expect a decline in the prevalence of consolidated democracies would be the most difficult to offset, as the only conflict-mitigating factor that our assessment identified as comparable in strength to this decline is an increase in economic interdependence. However, the prevalence of consolidated democracies and economic interdependence historically have tended to co-vary. As a result, we expect that it is unlikely that economic interdependence will increase in a future in which the prevalence of consolidated democracies is decreasing. In contrast, declining U.S. preeminence can be offset by increases in democratization or a strengthening of the capabilities of international organizations, neither of which co-vary strongly with U.S. preeminence.

We expect that the incidence of intrastate conflict will increase if the capacity of state institutions or the rate of economic growth declines. This combination of key factors is of particular concern for the future of intrastate conflict because of the strong relationship between the strength of state institutions and the rate of economic growth. It is exceedingly difficult to

strengthen institutions in poor economic conditions (i.e., with no fiscal bases) and almost impossible to achieve sustainable economic growth in the absence of state institutions. Strong state institutions and economic growth tend to go together. This reduces the effectiveness of available options for mitigating intrastate conflict in countries with weak state institutions and low economic growth, and may in part explain the greater persistence of intrastate conflict compared with interstate conflict in the system.

The Alternative Futures Tool includes all combinations of changes in up to three key factors. It may be interesting in future research to examine alternative futures in which more than three factors vary from their projected baselines, and that account more explicitly for linkages between factors. This may be of particular importance in alternative futures that are characterized by related and reinforcing trends. For example, increasing economic growth, consolidated democracies and international norms for pacific dispute settlement may trigger a positive cycle that also leads to lower ethnic and sectarian polarization and strengthened international organizations. In contrast, declining capacity of state institutions and economic growth, coupled with increased diffusion of lethal technology could trigger a downward spiral associated with increased ethnic and sectarian polarization, declining economic interdependence and increased resource stress.

## Introduction

The goal of our research was to use empirical evidence and an extensive review of the social science literature on the causes of conflict to identify historical conflict trends and to develop projections of future conflict trends to assist military planners and analysts engaged in thinking about the Army's future operating environment. Although there have been many assertions that the nature of conflict has been changing since the end of the Cold War, a systematic empirical review of different types of conflicts undertaken in parallel with an analysis of the causes of conflict provides a framework through which to assess future conflict trends.

As part of our research process, we developed a typology to classify conflict types and used multiple data sources to track trends in the nature, incidence, and intensity of conflict since 1946. We carried out an extensive review of the literature about armed conflicts to determine the possible reasons for changes in conflict patterns and to assess the potential for a change in these patterns in the future. Based on this review, we identified ten key factors that influence the nature, incidence, and intensity of conflict. We used these findings to develop projections for incidence of interstate and intrastate conflict trends. We also developed a tool that assessed all possible combinations of the key factors for incidence of conflict and used it to gain a better understanding of the conditions under which the baseline projections of conflict incidence might change. We focused on the conditions that might lead to greater incidence of conflict and on ways that the United States could affect those changes in a countervailing fashion. Below we summarize our findings, draw out the implications for the Army, and offer final observations.

### Conflict Trends and Drivers

#### Conflict Trends

The main finding that emerges from our empirical analysis of conflict trends is that overall levels of conflict have been declining in the past two decades. The nature, intensity, and frequency of conflict have changed since the end of the Cold War, generally shifting from wars fought directly between states to various forms of "internal" or intrastate violence, including insurgencies, guerilla wars, terrorism, organized and large-scale criminal violence, and protests.

Trends in interstate violence have seen the steadiest decrease in the incidence and intensity of armed conflict. Interstate conflict has followed a clear downward trend since its peak in the late 1970s and 1980s.

The downward trend in intrastate conflict and low-intensity violence has been slower and less decisive than for interstate conflict and has shown an upward turn in recent years. The

downward trend is especially true when we consider ethnic conflict (where conflicting parties are divided along politicized ethnic or sectarian identities) but it applies as well to other forms of low-intensity violence that involve nonstate actors or that occur at the societal level—for example riots, assassinations, guerilla warfare, and terrorism—as well as more-formalized armed conflict between nonstate groups. In any event, a much greater percentage of conflict within the international system now takes place within states rather than between states. The recent uptick in incidence of intrastate conflict is particularly evident at lower intensities. While this increase is notable, it is also important to consider this trend in context: The increase is well within the range of past fluctuations, and intrastate conflict still remains well below its peak of the late Cold War period.

What is especially interesting concerning the overall trends in interstate and intrastate conflict is that the same patterns emerge no matter what databases we used. We consulted all the major conflict databases as well as many lesser-known ones. The data sets measure conflict differently but the similarity of trends no matter what database we consulted give us confidence in our findings.

#### Conflict Drivers

Based on our assessment of interstate and intrastate conflict analyses, we identified ten key factors whose effect on conflict trends is likely to be most important. They are:

- capacity of state institutions
- prevalence of consolidated democracies
- degree of ethnic and sectarian polarization
- rate of economic growth
- extent of economic interdependence
- degree of U.S. preeminence
- capabilities of international organizations
- strength of international norms
- diffusion of lethal technology
- extent of resource stress because of population pressures.

For interstate conflict, the key conflict drivers we identified in the literature are the prevalence of consolidated democracies, the capabilities of international organizations, and the degree of U.S. preeminence. Of these three key factors, we expect a continued strengthening of democratic consolidation and international organization growth globally. In contrast, a continued decline is the most likely trend in U.S. preeminence, and emerges as a concern in this analysis for the future incidence of interstate conflict. However, we expect that the loss of interstate conflict deterrence that might result from a decline in U.S. preeminence may be offset by an

increase in the prevalence of consolidated democracies and the capabilities of international organizations.

For intrastate conflict, the key conflict drivers are the capacity of state institutions and the rate of economic growth. Both factors have been trending upward over time, and these trends are expected to continue. However, these two factors are closely intertwined. Weak institutional capacity reduces countries' economic opportunities, while weak economic growth reduces governments' resources to increase governance. As a result, declines in these two factors would create vulnerabilities that we expect to increase intrastate conflict and that would be difficult to mitigate.

## **Conflict Futures**

## Baseline Conflict Projections

We developed baseline projections about the most likely future interstate and intrastate conflict trends based on historic conflict patterns and the hypothesized causal relationships we identified through our literature review of the causes of armed conflict. These projections represent a "no surprises" baseline future in which the ten key factors identified as conflict drivers maintain their current trends.

In keeping with the historic conflict trends, both the interstate and intrastate baseline future conflict projections show a continued decline through 2040. With regard to interstate conflict, the projection declines from an already low starting point (one conflict in 2014 and zero in 2015) to a similarly low projection of just over one conflict by 2040. The intrastate conflict trend projects a gradual decline from a much higher starting point (above 20 conflicts per year in 2015) to below ten conflicts per year by 2040. This is a significant decline, but one that could be reversed by any number of shocks or changes within the international system. Taken together, these baseline projections of conflict incidence suggest that a smaller number of conflicts will remain by 2040 and those that do remain are most likely to be intrastate.

#### Alternative Futures

Lest the projections of very low incidence of conflict by 2040 be taken at face value, we note that although the baseline projections reflect our projection of future conflict trends, divergence from the baseline projection is likely. Our projections are a major part of our analytical exercise to understand potential for future conflict incidence. But all projections beyond the immediate future are subject to modification because of a different pace of expected incremental change as well as unexpected sudden discontinuities. While there may be better grounds to understand the causes and the effects of incremental change, shocks are impossible to predict with any specificity. What we can do, on the basis of our understanding of baseline trends, is hypothesize

major shocks to the key factors for incidence of conflict and then assess the magnitude of the impact these shocks might have upon the conflict projections.<sup>1</sup>

As a result, the baseline conflict trend is not the only future military planners should take into account when preparing for future operations; they need to understand alternative futures as well. We developed an exploratory analysis tool to assess the extent to which projected changes in our ten key factors contributed to more conflict-prone alternative futures. The tool includes a set of 1,160 futures and an easy-to-use interface with which to explore them. For each future, the tool identifies future signposts to watch for, expected causal relationships between each key factor and conflict, and visual displays of key factor projections. We used the tool to identify alternative futures that embody greater expectations of future conflict. We then "reversed history" to consider what could be done to mitigate the effect of the conflict drivers in these alternative futures.

The three factors that most strongly increased interstate conflict expectations were declining U.S. preeminence, declining capabilities of international organizations, and declining prevalence of consolidated democracies. Of the three factors, we expect a decline in the prevalence of consolidated democracies would be the most difficult to offset, as the only conflict-mitigating factor that our assessment identified as comparable in strength to its decline is an increase in economic interdependence. However, the prevalence of consolidated democracies and economic interdependence has historically tended to co-vary. As a result, we expect that economic interdependence is unlikely to increase in a future in which the prevalence of consolidated democracies is decreasing. In contrast, declining U.S. preeminence can be offset by increases in democratization or a strengthening of the capabilities of international organizations, neither of which co-vary strongly with U.S. preeminence.

We expect that the incidence of intrastate conflict will increase if the capacity of state institutions or the rate of economic growth declines. This combination of key factors is of particular concern for the future of intrastate conflict because of the strong relationship between the strength of state institutions and the rate of economic growth. It is exceedingly difficult to strengthen institutions in poor economic conditions (i.e., with no fiscal bases) and almost impossible to achieve sustainable economic growth in the absence of state institutions. Strong state institutions and economic growth tend to go together. This reduces the effectiveness of available options for mitigating intrastate conflict in countries with weak state institutions and low economic growth, and may in part explain the greater persistence of intrastate conflict compared with interstate conflict in the system.

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<sup>&</sup>lt;sup>1</sup> Positing shocks always has to overcome the disbelief that a seemingly low-likelihood event can happen. However, the supposedly low-likelihood events only seem this way prior to their happening. The end of communism and the disintegration of the Soviet Union or a catastrophic attack on the U.S. homeland by a nonstate actor are just two events in recent past that analysts assessed as very low likelihood and yet did happen —and, as our empirical assessment shows, they led to a change in conflict patterns. Of course, after the fact, these events seemed obvious and, in a teleological retrospective view, there were plenty of signposts along the way that might have led analysts to a better prediction of these events.

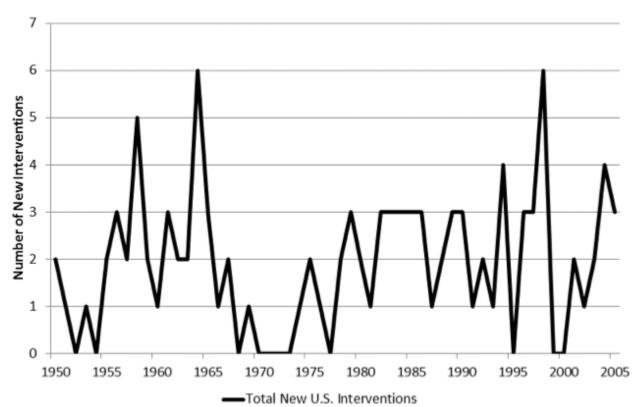
## Caveats and Cautionary Notes

Our main finding is to confirm the lower incidence of conflict at the systemic level. Moreover, the factors that we have identified as having contributed to the lower incidence of conflict in recent decades are still in place and may continue to exert a conflict-diminishing influence, driving the incidence of conflict even lower. However, there are five caveats, over and above those that we presented already in our discussion of alternative futures, that military planners need to consider as they use such information.

Trends toward lower conflict incidence don't necessarily imply a commensurate reduction in the number of U.S. military interventions. The two trends are not directly related. In fact, lower overall incidence of conflict also may entail a higher propensity toward U.S. intervention behavior. The decision to use military force reflects U.S. strategic preferences and specific policy preferences of the executive branch in power at a given time. While there are some broad patterns in U.S. interventions, there is a general consensus among scholars that most, if not all, of the post-Cold War era U.S. interventions just as easily might not have taken place. (Afghanistan in 2001 may be the exception, although the transition from a counterterrorist mission to a major counterinsurgency operation was not preordained.) Whether interventions involve a large military force—such as the Gulf War in 1990–1991 or Iraq in 2003—or smaller ones—such as Somalia, Bosnia-Herzegovina, Kosovo, Timor-Leste, or Libya—none of these were dictated by a fundamental and immediate threat to the survival of the United States. But while case-specific decisionmaking will determine whether an intervention takes place or not, it is also a given that the United States, as the preeminent power in the state system, will use military power to enforce certain norms and to uphold the credibility of its position in the international state system. In that sense, even though the specifics of interventions may be idiosyncratic, the structural reasons for U.S. international behavior shape the overall pattern of interventions. Figure 6.1 shows the initiation of U.S. interventions using military force since 1950. Figure 6.2 shows the number of ongoing U.S. interventions since 1950. The pattern, compared with global incidence of conflict, is not readily apparent, although there is an everpresent level of engagement that persists throughout the period.

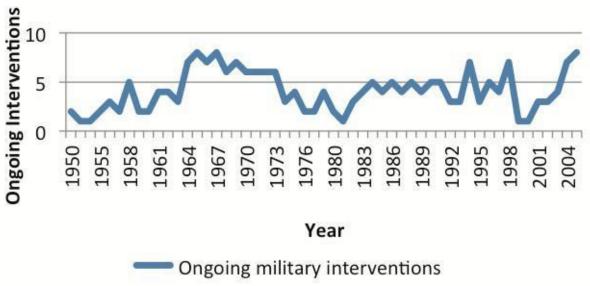
<sup>&</sup>lt;sup>2</sup> Benjamin Miller, "The Logic of U.S. Military Interventions in the Post-Cold War Era," *Contemporary Security Policy*, Vol. 19, No. 3, December 1998, pp. 72–109.

Figure 6.1. New U.S. Interventions, 1950-2005



SOURCE: Pearson and Baumann, 1993; Emizet F. Kisangani and Jeffrey Pickering, *International Military Intervention, 1989–2005*, Ann Arbor, Mich.: University of Michigan, Inter-University Consortium for Political and Social Research, Data Collection No. 21282, 2008b.

Figure 6.2. Ongoing U.S. Interventions, 1950-2005



SOURCE: Pearson and Baumann, 1993; Kisangani and Pickering, 2008b.

Our baseline projections indicate a decline in the degree of U.S. preeminence in the state system. The rate of decline may change but the range of all projections not originating from systemic shocks points downward. If the decline is at a pace that is faster than the baseline pace or there is a similarly fast-paced rise of a dissatisfied challenger to the position of the United States in the state system, then the conflict incidence projections may shift in direction. As a challenger closes the gap with the United States, there is potential for miscalculation by the challenger under conditions of power parity or near parity,<sup>3</sup> and the possibility of miscalculation rises even more in cases of fast-paced growth of power by the challenger. The miscalculation may lead to direct conflict, though the more frequent pattern of conflict among major powers is that of a long-lasting rivalry with many proxy wars. Another pattern that may come to pass is one where the preeminent but declining power intervenes more frequently than previously in order to uphold its eroding credibility with other actors in the international state system. The flip side of such behavior is that a perception of U.S. decline by other actors may lead to lower assessments of the likelihood of U.S. intervention, leading to a lower threshold for intrastate conflict incidence.

The trends toward lower conflict incidence globally might not be uniform and might not hold evenly across all regions. In fact, given the differences in levels of development and predominant regime types in different regions of the world, it is likely that patterns will differ at the regional level. It is conceivable that even if the trends in key factors are the same in two regions, incidence of conflict in one region may drop precipitously but will rise or remain the same in the other. For example, improved governance, democratization, and high rates of growth in South America may drive conflict incidence to very low levels. But the same trends in West Africa may lead to increased state capacity, leading to lower intrastate conflict but higher propensity for interstate conflict, as the states in the region go through the state maturation process that other regions have gone through previously and question the norm of inviolability of existing borders.

The different levels of conflict incidence at the regional level are related to the potential for U.S. intervention. If a regional-level pattern indicates higher conflict incidence and that region is assessed as having specific geostrategic importance for the United States, then the propensity for U.S. intervention in that region would rise. The same applies under conditions of emerging major power rivalry. Just as during the Cold War there were areas of the globe that previously had not been perceived by U.S. policymakers as having any great intrinsic strategic value to the United States but became important in the context of a larger rivalry, the same pattern may reappear, leading to exploitation of local conflicts, engaging major power interests, and leading to greater likelihood of a U.S. intervention.

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<sup>&</sup>lt;sup>3</sup> Thomas S. Szayna, Daniel L. Byman, Steven C. Bankes, Derek Eaton, Seth G. Jones, Robert E. Mullins, Ian O. Lesser, William Rosenau, *The Emergence of Peer Competitors: A Framework for Analysis*, Santa Monica, Calif.: RAND Corporation, MR-1346-A, 2001.

There is a limitation to the existing databases that may limit their utility for forward-looking purposes. All of the databases focus on politically motivated violence, whether these are disputes between states over borders, politically mobilized ethnic groups demanding greater group-level rights, or ideologically motivated violence over distribution of resources. The usual metric of conflict intensity, which we also use, is battle deaths. However, a more appropriate way of looking at incidence of violence may be in terms of what is politically important, rather than politically motivated. The level of violence in most Central American countries (and many Caribbean and northern South American countries), as assessed by homicide levels, is so high that it dwarfs the fatality levels associated with most ongoing insurgencies. However, because it is not politically motivated, these data are not captured in any of the conflict databases we reviewed.

For example, Honduras had 7,172 homicides in 2012,<sup>4</sup> a homicide rate of 92 per 100,000, giving it the position of the world's most dangerous country. By comparison, the homicide rate in the United States stood at 4.7 per 100,000 in 2011 (a uniquely high level of homicide among developed countries, as most other highly developed countries have rates around 1 per 100,000). Other countries in Central America also show high homicide rates, with El Salvador having a rate of 70.2 in 2011,<sup>5</sup> and Guatemala and Belize hovering near 40 per 100,000 in 2011.<sup>6</sup> Similarly, in some eastern, central, and southern African countries, homicide rates are higher than 30 per 100,000, and those figures are subject to upward revision because of poor availability of data. In contrast, figures from the United Nations Mission in Afghanistan show that politically motivated violence led to 2,754 civilian deaths there in 2012. Adding some 3,400 fatalities among the Afghan security forces in 2012,<sup>7</sup> the total number of (non-Taliban) Afghan fatalities from politically motivated violence that year was around 6,150, which is a lower number than the fatalities from criminally motivated violence in Honduras, even though Afghanistan's population is almost four times larger.

The facts that violence in Central America is fueled by profit—rather than political—motives, related to the drug trade, and carried out by the highly organized criminal networks that supply drugs to the lucrative U.S. market do not diminish the lack of personal security and safety for the populations of those countries affected by the violence. At some level, the criminal violence becomes political in that it illustrates the inadequacy of existing political institutions and exposes the inability of the state to provide the most basic public good—security—to the citizens.

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<sup>&</sup>lt;sup>4</sup> Data from Violence Observatory, National Autonomous University of Honduras, 2013. World Bank data indicate that the homicide rate in Honduras has dropped slightly in 2013–2014 to the low 80s per 100,000.

<sup>&</sup>lt;sup>5</sup> This rate is equal to the highest annual homicide level achieved in Colombia during its decades-long civil war, with such a rate achieved only once, in 2002, in the last 15 years.

<sup>&</sup>lt;sup>6</sup> Data from the United Nations Office on Drugs and Crime, Global Study on Homicide, 2013.

<sup>&</sup>lt;sup>7</sup> Coalition fatalities in Afghanistan in 2012 numbered 402. Data from icasualties.org, homepage, undated.

Because the existing databases on conflict incidence focus on political disputes, they do not capture this type of politically important, if not politically motivated, incidence of conflict and violence. And yet, in the current post-ideological era, with political disputes centered more on group rights and distribution of resources rather than on fundamental systemic changes in the type of political organization, the most deadly and most widespread form of violence is criminal violence. One element to consider is that (assuming relative stability in the international state system and some co-opting of potential challengers to U.S. preeminence) the ability of existing institutions to provide security and prevent the supplementing of formal institutions of governance by informal, criminal-linked networks might emerge as a paramount security issue, leading to U.S. interventions either to prop up a failing state or to deal with the consequences of a low-functioning state. The subversion of the state from within and the resulting violence is a caveat to consider in any projections of conflict incidence, since the existing databases have implicit biases as to what kind of violence is important and worth tracking.

The rapid spread of potentially lethal technologies represents a potential breakthrough capability that could negate some existing U.S. strengths. The specifics of such technologies are not possible to specify ahead of time because they depend on breakthroughs. Whether it is miniaturization of levels of lethality associated with nuclear weapons or genetically specific biological weapons, breakthrough technologies have the potential for making adversaries much more potent, whether they are state or nonstate actors. Such ideas may be in the realm of science fiction now, but that was where robotic warfare and the use of a personal computer for military purposes stood not that long ago. From a mid- and long-term perspective, breakthrough technologies, their weaponization, and rapid diffusion are among the most likely shocks to the system.

Resource competition did not emerge as all that important a factor for future incidence of conflict. That is because the negative consequences of resource competition can be mitigated through good state institutions, effective governance, and economic growth. But our time frame for understanding the potential impact may be problematic. In other words, the conditions existing in the period we used to make the projections might no longer hold and the one standard deviation range for our projections might underestimate the actual range for our projections. For example, suppose that the extent of stress upon the environment because of human activity in the period since 1970 has been within the carrying capacity of the planet to adjust but we have reached or are about to reach a tipping point whereby rapid and severe consequences result. That would make the projections invalid. Therefore, if current prognoses of the rate of environmental degradation are wrong and there is some kind of a tipping point that may initiate quick and catastrophic resource stress, then our projections for only limited impact of resource stress on conflict incidence may be wrong. This is one of the big unknowns, in that we simply do not know if climate change may lead to a rapid catastrophic environmental change. The impact of such a turn of events on conflict incidence would be especially pronounced in regions of poorly functioning institutions and low governance capacity.

## Implications for the Army

What is the role of the Army in ensuring that it is prepared to contribute to the continuation of the trends and to face the emerging challenges described in this report? A report of this nature cannot provide specific recommendations about optimal U.S. Army capacity or capabilities. Rather, it offers a few broad insights into the sorts of missions the Army is likely to face in the coming decades.

The research presented in this report highlights the declining incidence of interstate conflict. The implications of this trend, however, are subject to debate. Our research echoes that of others in finding that one of the stabilizing factors behind this downward trend has been U.S. preeminence in the international system. That preeminence, however, has been declining recently, suggesting at least the potential for concomitant increases in interstate conflict.

Moreover, one of the clearest patterns of violent intrastate conflict in the past several decades revolved around the rise and decline of the Cold War. Nuclear parity generally pushed superpower rivalry to the substrategic level, fueling proxy wars throughout the weak states of the postcolonial world. As U.S. relative power declines and that of other countries increases, similar proxy conflicts may erupt. Many interpret recent Russian subversion in eastern Ukraine and Iranian and Gulf countries' involvement in conflicts from Syria to Libya in precisely these terms.

These trends suggest that the U.S. Army will continue to play an important role in deterring conventional conflict and possibly in responding to proxy wars by other powers.

The Army also has important indirect functions that might help reduce the future incidence of violent conflict. Through its military-to-military engagements and other forms of security cooperation, the U.S. Army seeks to strengthen both the capabilities and accountability of partner military forces. Such activities can help other countries contribute positively to multilateral peace operations, deter armed challenges to legitimate state authorities, and strengthen civil-military relations in ways that reinforce democracy—all factors that reduce the incidence of conflict according to the research in this volume and many similar studies. The effectiveness of such security cooperation activities is beyond the scope of this report. To the extent that the Army can provide such effects, however, these activities also contribute to the declining incidence of conflict.<sup>8</sup>

Taken together, this suggests that, to credibly deter interstate challenges and reduce the likelihood that the United States will become embroiled in proxy interstate conflicts, the Army must be prepared for interstate conflict against a range of state actors. However, we expect that future Army operations are more likely to be interventions in intrastate conflicts and Army forces

RR-350-A, 2014.

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<sup>&</sup>lt;sup>8</sup> A recent RAND study found that security cooperation activities contribute in a modest but statistically significant way to partner stability. See Michael J. McNerney, Angela O'Mahony, Thomas S. Szayna, Derek Eaton, Caroline Baxter, Colin P. Clarke, Emma Cutrufello, Michael McGee, Heather Peterson, Leslie Payne, and Calin Trenkov-Wermuth, *Assessing Security Cooperation as a Preventive Tool*, Santa Monica, Calif.: RAND Corporation,

have to be ready for the operational environments typically associated with intergroup (ethnic, sectarian) conflicts and insurgencies.

The specific operational environments can be explored using the exploratory analysis tool we developed. The tool puts an enormous amount of data at the fingertips of Army analysts for use in experimentation and it allows the Army to elaborate and war-game a number of futures that are based on empirical trends and is theoretically sound. It also offers the Army the potential to analyze countermoves to any emerging threats and to structure its forces accordingly.

# Appendix A. Trends in Conflict, 1946–2015: A Review of Conflict Types and Data Sets

This appendix presents a typology of armed conflict and then reviews existing trends in violent conflict since 1946 through a detailed examination of major conflict data sets. The typology categorizes types of armed conflict according to relevant actors and level of intensity measured by battle deaths. We review a number of different databases for each type of violence. Although the data sets differ in their definitions of conflict, the general trends they report are similar. Our review finds that conflict is declining in frequency and intensity at the global level and in aggregate terms. This downward trend is clearest and strongest for high-intensity interstate conflicts—though all interstate conflicts have become rare; those that remain are primarily at medium and low intensities. International crises and militarized disputes between states that fall short of war have also become somewhat less frequent. This is particularly true for those conflicts that escalate to direct military confrontation involving fatalities. However, these crises and conflicts have remained more common than interstate wars. It is possible, therefore, that some of the decline in violent interstate conflict may result from improved international dispute resolution processes.

The downward trend in intrastate conflict has been slower and less decisive, particularly at medium and low intensities, and certain types of intrastate conflict have shown an uptick since 2014. Although intrastate conflicts have declined notably since their early 1990 peaks at all intensities, trends in medium- and low-intensity conflict plateaued after 2001 and then increased in 2014–2015, due to new conflicts and to enduring, ongoing war. These general trends hold for both civil (politically driven) and ethnic conflicts. Demonstrations, riots, strikes, assassinations, and guerilla warfare also show little evidence of declining or disappearing, as suggested by recent spikes in these forms of violence since 2010, most associated with the Arab Spring and its aftermath. Nonstate conflict, including wars between nonstate groups and violence in the form of domestic and transnational terrorism, occurs mostly at lower intensities and has been increasingly frequent since 2001 by some measures. One-sided state violence has generally become less common and, when it does occur, is at lower intensities. International norms may play a role in explaining this decrease in one-sided violence. However, it is worth noting that one-sided violence by state actors has not been eliminated. As a caveat, the effect of changes in the quality and quantity of media reporting may contribute to some of these upward trends in low-intensity intrastate conflict.

Finally, the number of noncombat military interventions has increased since the end of the Cold War, both for the United States and globally. This trend is partly because of an increase in the number of large multilateral peacekeeping and humanitarian missions since 2001, but also reflects an increase in peacekeeping and peacemaking activities more generally. On the one

hand, this increase in peacekeeping operations may contribute to the overall decline in conflict previously noted. On the other, it may suggest an increase in the demand or need for peacekeeping operations in response to an increased frequency of instances of low-intensity intrastate violence.

Overall, then, it appears that conflict has not been eliminated—it has simply changed in nature and intensity. While medium- to high-intensity interstate violence used to be the predominant form of conflict, lower-intensity forms of violence involving nonstate actors and occurring at the societal level have become relatively more common. Although improvements in the quality and quantity of media reporting on lower-intensity intrastate violence may contribute to the observed trends, the shift in the type and intensity of conflict and political violence seems fairly robust across types of violence and data sets. The shift is most important because it may have implications for military planners preparing for future challenges.

## Defining "Conflict": A Typology

The nature, intensity, and frequency of conflict have changed over the past several decades, generally shifting from wars fought directly between states to various forms of "internal" or intrastate violence, including insurgencies, guerilla wars, terrorism, organized and large-scale criminal violence, and protests. However, the timing, speed, and permanence of these shifts have varied and are not uniform for all types of political violence. This report presents a typology of conflict and then reviews existing trends in violent conflict since 1946 through a detailed examination of multiple data sets of violent conflict. In addition to mapping trends in violence in relevant data sets over time and comparing trends across data sets, the report also includes a typology that can be used to categorize "armed conflict" as broadly defined. The typology is used to identify the different types of interstate and intrastate violence that exist and to frame our discussion about how the relative frequency of different types of conflict has changed over time and may change in the future.

Our approach in this report was to be as holistic as possible. Many studies examine particular types of violence or rely on single data sets. Although such approaches may be appropriate for the questions that other observers seek to answer, they were inadequate for our purposes. The U.S. Army must be prepared to respond to contingencies across the entire spectrum of operations, potentially anywhere around the globe. Consequently, we were interested not only in trends in specific types of violence, but also in how violence may be shifting from one type to another. Moreover, it was imperative that we develop as robust an empirical basis for these trends as possible. Each quantitative database has its own strengths and weaknesses, depending on the peculiarities of how it aggregates diverse phenomena. The fact that all of the data sets consulted in this review yielded trends that are broadly consistent, however, suggests that we have strong reason to believe in the results.

#### What Is Conflict?

A study of trends in armed conflict is complicated by the many different definitions of "conflict" and the many intensities of political and social violence encompassed by this single term. "Armed conflict" may refer to civil war, ethnic war, and interstate war—as well as violence that falls short of war, such as militarized disputes, terrorism, and riots or strikes. Large data sets on each of these manifestations of violence support a quantitative assessment of trends, but still do not provide a single definition of armed conflict. Instead, each has a unique threshold of fatalities or set of required characteristics for event identification, and each focuses on a slightly different form of violence. As a result, a full picture of trends in conflict must incorporate all elements and types of conflict and integrate across these different data sets in a meaningful way.

## Typology of Conflict

To accomplish this task, we developed a typology of violence that categorizes conflicts along two dimensions, intensity and actors involved. Our typology of conflict, illustrated in Table A.1, identifies, describes, and categorizes different types of political violence across the conflict "concept space" and is organized along two key dimensions: primary actors and level of intensity.

The first dimension focuses on the actors involved in the conflict or violence. Understanding the key actors in armed conflicts and how they change over time is an important characteristic of conflict that provides insight into the motivation for conflict, its form and intensity, and potential consequences (regime change, physical destruction, etc.). The typology defines several types of conflicts based on primary actors.

**Table A.1. Typology of Conflict** 

	Interstate	Intrastate				
		One-Sided State	State v. Nonstate	Organized Societal	Spontaneous Societal	
High Intensity: Battle deaths of 100,000 per year or 500,000 total					,	
Medium Intensity: Battle deaths of 1,000 per year or 100,000 total						
Low Intensity: Battle deaths of 25 per year or 1,000 total						
Minimum Violence: Battle deaths of 0–25 per year; nonviolent conflict/dispute						

Interstate conflict involves violence between two or more states. Intrastate violence occurs within a single state and, according to the typology, comes in many different forms. These include:

- one-sided state violence, including genocide, "ethnic cleansing," purges, extrajudicial (state) killings.
- state versus nonstate violence, including civil wars, wars of independence, insurgencies, some riots
- organized societal violence (such as ethnic or intercommunal war or conflict between two nonstate actors) in which the state is not a major participant, some types of terrorism, some riots, and organized violent crime
- spontaneous societal violence, such as pogroms, uprisings, some riots, and everyday violent crime.

Our second typology dimension, conflict intensity, is based on total battle deaths. We define four levels of violence: minimum violence, which includes events involving 0 to 25 deaths, low-intensity conflict, which includes 25–999 deaths, medium-intensity, which includes 1,000 to 99,999 deaths, and high-intensity, which includes violence over 100,000 battle deaths. The number of battle deaths is an imperfect measure of conflict intensity because it captures only one small piece of the cost of a conflict and the effect of a conflict on individual life. For example, conflict may cause famine or disease that wipes out hundreds of thousands of lives or economic devastation that leads to widespread poverty, but neither of these costs will be included if intensity is only based on battle deaths. Furthermore, battle deaths can be difficult to count, as it is not always clear who is a combatant. There are some alternative measures of intensity being developed to address these shortcomings. Some use indexes to rate the level of violence, others

look at economic costs, or disability-adjusted life years. Because most data sets currently still rely on battle deaths or "conflict-related deaths," we will use this measure for the current report.

Our typology has a number of advantages over other definitions of conflict and approaches to the study of conflict. Rather than focusing on only one manifestation of armed conflict, it comprehensively captures the conflict *concept space*, or the full range of types of political violence that might be considered "armed conflict" under existing definitions of the term. It includes interstate wars at all intensities, as well as intrastate wars and political violence at lower intensities and the societal level, captured in strikes, demonstrations, or protests. Considering conflict across this broad typology will allow us to describe trends in armed conflict in a way that is more complete and more nuanced than would be the case if we relied on only a single database. At the same time, the typology disaggregates conflict along two fairly objective and usually discernible characteristics (actors and intensity), allowing us to more easily bin individual conflicts and map trends over time. Finally, we have constructed the typology and calibrated its intensity levels in a way that will allow us to move between data sets, observe and compare trends in violence according to several different definitions, and thus present a more robust picture of conflict trends.

The typology also has some limitations. First, there will be overlap between the typology's different categories. For example, the line between conflicts involving a state and a weak nonstate actor and one-sided violence may be a fine one in some instances. Certain types of conflict may fit into several different cells. For example, antigovernment protests may fall into the minimum violence category, or they may include minimum-, low-, or high-intensity violence and be organized or spontaneous depending on the situation. Second, some conflicts may include many types of political violence, defying an easy categorization. As a result it will be useful to think of the typology as a guide with relatively porous borders, rather than a framework with fixed internal boundaries. Finally, the conflict types and intensity thresholds defined in the typology may not always correspond with the exact conflict as defined in existing data sets. It may be especially hard to distinguish between organized and spontaneous societal violence. Table A.2 provides "best examples" for each type of conflict defined by the typology.

The typology can be used in several different ways. First, we can use it to describe trends in conflict, considering how the distribution of ongoing or new conflicts across the matrix changes over time. Second, we can use the typology to consider how different sorts of changes or shocks to the external system have affected the form and intensity of conflict in the past and might affect the form and intensity of conflict in the future. Finally, we can use the typology as a way to integrate and combine the many different data sets that exist for the study of conflict and to discuss and use these data sets (and their definitions of conflict) together in our analysis of conflict trends.

Table A.2. Typology of Conflict with Examples

		Intrastate				
	Interstate	One-Sided State	State v. Nonstate	Organized Societal	Spontaneous Societal	
ligh Intensity: Battle deaths of 00,000 per year r 500,000 total	Wars	Genocide, ethnic cleansing	Civil or ethnic war, wars of independence, ethnic cleansing	Ethnic or intercommunal war, ethnic cleansing		
Medium Intensity: Battle deaths of ,000 per year or 00,000 total	Wars	Genocide, purges, coups	Civil or ethnic war, wars of independence, guerilla war, insurgency	Ethnic or intercommunal war, guerilla warfare	Intercommunal or intracommunal violence, riots, uprisings	
ow Intensity: lattle deaths of 5 per year or ,000 total	Militarized disputes, armed conflict	Extrajudicial killings, disappearances, coups	Civil or ethnic violence, insurgency, guerilla war, extrajudicial killings, riots	Terrorism, guerilla warfare, intercommunal or intracommunal violence	Uprisings, intercommunal or intracommunal violence	
finimum fiolence: Battle eaths of –25 per year; onviolent onflict/dispute	Disputes/ crises	Arrests, detentions, government crises	Protests, strikes, demonstrations	Protests, strikes, intercommunal or intracommunal disputes	Strikes, protests, intercommunal or intracommunal disputes	

## The Typology and Key Data Sets

Using the typology and major data sets on armed conflict, the project report summarizes trends in violent conflict focusing on the period between 1946 and 2011. Table A.3 lists these data sets, the years covered, types of conflict included, and the definition of conflict used by each. Together, the data sets will allow us to provide insight into most types of conflict, including societal violence, although specific data sets may be most useful for describing specific types or intensities of conflict. Several observations are relevant. First, coverage of interstate and intrastate violence is clearly more complete than coverage of nonstate and societal violence. Second, there are data sets that cover several different types of violence and those that address only one form. When a data set covers several different types of violence, our ability to disaggregate the data along the boundaries of the typology will depend on how the data set reports and codes incidents of conflict. For example, although the CNTS Databank gives us insight into societal conflicts (such as riots, protests, and demonstrations), it does not provide fatality information or separate between spontaneous and organized events. Subsequent sections in the report identify these limitations and work around them to the extent possible.

Table A.3. Data Sets and Definitions

Data Set	Years	Types of Conflict	Thresholds for Inclusion*
COW	1816–2007	Interstate, intrastate, nonstate; extrasystemic	War must have 1,000 battle deaths in 12-month period, each side must mobilize at least 1,000 persons
UCDP	1946–2015	Interstate, intrastate, nonstate; extrasystemic; one-sided state; internationalized intrastate**	"Armed conflict" requires 25 deaths per year; "major war" requires 1,000
PITF	1946–2015	Ethnic, revolutionary conflict; genopoliticide	Conflict must include 1,000 total battle deaths and at least one year with 100 battle deaths Genopoliticide: Violence must have elite sanction, endure over longer period, result in death of a substantial portion of a communal or political group
MEPV	1946–2015	Interstate, wars of independence, intrastate (ethnic and civil)	Violent episode must have at least 500 total conflict- related deaths (base rate 100 per year)
GTD	1970–2015	Terrorism	Incidents must have political, religious, or social goal, communicate to an audience outside victims, violate International Humanitarian Law
CNTS	1916–2015	riots, protests, antigovernment demonstrations, strikes, revolution, guerilla war	Each event has specific definition, focused on the participants, motivation, and scope. Some are nonviolent, others are violent, but there are no fatality thresholds.
International Military Interventions	1946–2005	Military interventions	" the movement of regular troops or forces (airborne, seaborne, shelling, etc.) of one country inside another, in the context of some political issue or
MID	1816–2010	Militarized disputes that fall short of war	dispute" <sup>b</sup> Involve use or display of force, but have fewer than 1,000 battle deaths
ICB	1946–2013	Interstate crises, most falling short of war	Crises have three major characteristics: "(1) there is a threat to one or more basic values (2) an awareness of finite time for response to the value threat (3) heightened probability of involvement in military hostilities" <sup>C</sup>

NOTE: \*More detail and definitions for each conflict type according to each database are provided earlier in this report, along with full citations. \*\*The UCDP One-Sided State Violence data set goes through 2014.

a See Chapter Three for more detail.

## Scope and Implications of Measurement Error

While the data sets that we include in our review are relatively comprehensive, there are certain sources of measurement error that affect even the best of them and that will also have implications for the trends that we observe. Most significantly, while high-intensity and interstate conflicts are likely to be accurately recorded over the entire period we are considering, the same

b Pearson and Baumann, 1993, p. 1.

<sup>&</sup>lt;sup>c</sup> Brecher and Wilkenfeld, 1997.

may not be true for low-intensity, intrastate, and nonstate conflicts and violence. Because most data sets rely on reporting and media coverage to count conflicts, smaller conflicts that attract less attention and such forms of violence as protests, riots, and demonstrations may be unintentionally excluded. This will be especially true in earlier decades, such as the 1940s and 1950s (the start of our window of observation), when media coverage was less consistent than it has been since 1990, particularly in developing countries. Even now, it is likely that certain instances of low-intensity violence in remote locations or authoritarian regimes go unreported.

Improvement in the quality and frequency of reporting, therefore, may lead to an apparent increase in the number of conflicts reported even if their true incidence has remained the same or even decreased. This systematic bias could lead to incorrect inferences about recent trends and future directions of certain forms of violence if it is not properly included in any analysis of trends. We cannot correct for this bias entirely, but we will consider its implications for our assessment of recent trends and future directions of certain types of conflict.

#### What Is Excluded from the Review?

Although we have attempted to build a typology and collection of data sets that includes as many forms of armed conflict and political violence as possible, there are still certain types of violence that are excluded, primarily because there are insufficient data to reliably map trends over time. Important among these excluded categories will be drug-, gang-, and crime-related violence, forms of "conflict" that are particularly severe in Central America and in some African countries. In recent years, this type of criminal violence has been responsible for as many fatalities as more-organized forms of conflict elsewhere. In fact, homicide rates in a handful of Central and South American and Sub-Saharan African states reached rates as high as 80 per 100,000 individuals in 2011. For states with a population of 100 million or greater, this homicide rate would produce fatalities at the "high-intensity" level according to our typology.<sup>1</sup>

Certain data sources can give us a window into this type of violence, revealing, for instance, that it is often linked with drug and human trafficking, criminal gangs, and sexual assaults, and that it appears to be increasing in many of the areas where it is most problematic. However, in general, we simply do not have the types of data sets needed to analyze crime-, drug-, and gang-related violence in more detail. A brief summary of data sources that do exist and their limitations will make this point more clearly.

Probably the best source of data on criminal violence, including material related to drug trafficking and gang warfare, is the UNODC. These data include information on homicide, sexual assault, and other violent crime. However, this information is limited and unreliable in several ways. First, it covers a limited set of countries and years, preventing a time series analysis of international trends. Second, it relies on one of two sources of information, neither of which is completely trustworthy: self-reports or victimization surveys. Most of these data come

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<sup>&</sup>lt;sup>1</sup> United Nations Office on Drugs and Crime, 2011.

from country self-reports, and so reveal only what the individual reporting country chooses to submit. This makes it unlikely that the data are complete and accurate. In addition to the UNODC, the WHO uses these data when tracking fatalities due to "violent causes," making its fatality data similarly insufficient for our analyses. The other source of these data are "victimization" surveys collected in some countries. These surveys ask individuals to report whether they or someone they know have been victims of certain crimes. However, these data assume that individuals will accurately report their experiences, are subject to sampling concerns, and exist only for certain countries (mostly European countries, where rates of crime and violence are lower than elsewhere). There are more-detailed data on specific issues and specific countries, such as poppy cultivation in Afghanistan, human trafficking in Sub-Saharan Africa, or drug seizures in Central and South America. However, this material is still insufficient for the description or analysis of broader global trends, which are the main focus of this report.

Since we cannot provide a complete and systematic treatment of this crime-, drug-, and gang-related violence, we want to emphasize that societal violence of this type is still a significant source of destabilization, death, and destruction that should be taken into account when considering or assessing the aggregate amount of violence and conflict in the international system. While it is not always captured by existing data sets, it does figure prominently in the typology and may be an area for future study and analysis.

## Summary of Findings

Our review of conflict trends suggests a number of key findings. These are described in detail in the report, but we summarize them briefly here. Most significantly, at the global level and in aggregate terms, conflict has declined in frequency and intensity. This downward trend is clearest and strongest for interstate and high-intensity conflicts, which have become rare. The downward trend in intrastate conflict has been somewhat slower and less decisive at low intensities, with some types showing an increase in 2014–2015, although most of these forms of violence remain below their peaks in the early 1990s. The incidence of militarized interstate disputes and international crises has also been less frequent since the end of the Cold War.

As noted, not all forms of conflict are following the overall downward trend. For instance, low-intensity intrastate conflict, especially ethnic conflict, has generally increased in recent years. Demonstrations, riots, strikes, assassinations, and guerilla warfare also show little evidence of declining or disappearing as suggested by recent spikes in these forms of violence since 2010, most associated with the Arab Spring and its aftermath. Nonstate conflict, especially at low intensities, also appears increasingly frequent by some measures. As a caveat, the effect of changes in media reporting quality and quantity may contribute to these specific trends. Finally, the number of noncombat military interventions has increased since the end of the Cold War, both for the United States and globally.

Overall, then, it appears that conflict has not been eliminated; rather it has changed in nature and intensity. While medium- to high-intensity interstate violence used to be the predominant

form of conflict, lower-intensity forms of violence involving nonstate actors and occurring at the societal level have become relatively more common. This shift may have implications for military planners preparing for future challenges.

## Outline for This Appendix

The remainder of this appendix discusses trends in conflict and political violence more generally, using each of the data sets identified in Table A.3. It covers more-traditional forms of interstate and intrastate conflict, nonstate conflict, political violence by organized nonstate actors, societal violence, military interventions, and crises and disputes that fall short of war. Each section includes additional details on how each data set defines conflict, the types of incidents it includes, how the data set defines or measures conflict intensity, and where the trends reported by the data set fit within our conflict typology. We compare across intensities of violence, as well as across data sets, highlighting where existing data sets suggest similar trends and where the information they provide is different.

### Trends in Armed Conflict and War

Studies of armed conflict and war focus primarily on conventional wars that dominated political violence several decades ago, namely large wars between state actors or between a state actor and nonstate challenger. Intrastate violence between two nonstate groups has also been a focus of this literature, as has the tendency of third parties to intervene in ongoing conflicts. Data sets on this type of violence differ in how they define and code conflicts, but at a global level, the trends that these data sets reveal are largely the same. Both interstate and intrastate conflict have declined since their peaks in the 1980s and 1990s. This decline has been particularly marked for interstate conflict, which is now fairly rare. Intrastate conflict has also declined, but at a somewhat slower and more tentative rate, and with a notable uptick in 2014–2015. While high-intensity intrastate conflict declined more sharply, lower-intensity intrastate conflicts declined only until about 2000 before leveling out—then increasing, in some cases.

This section reviews relevant data sets and trends in interstate and intrastate conflict. For each data set, the discussion considers relevant definitions, how the data set fits into our conflict typology, and the key conflict trends the data set reveals. Comparisons across data sets are included at the beginning of the section. Table A.4 identifies the pieces of the typology addressed in this section.

Table A.4. Armed Conflict and War

		Intrastate			
	Interstate	One-Sided State	State v. Nonstate	Organized Societal	Spontaneous Societal
High Intensity: Battle deaths of 100,000 per year or 500,000 total	Major war		Major war	Ethnic/civil conflict Nonstate conflict	
Medium Intensity: Battle deaths of 1,000 per year or 100,000 total	Major war		War	Ethnic/civil conflict Nonstate conflict	
Low Intensity: Battle deaths of 25 per year or 1,000 total	Major war		Armed conflict	Ethnic/civil conflict Nonstate conflict	
Minimum Violence: Battle deaths of 0–25 per year; nonviolent conflict/dispute					

### Uppsala Conflict Data Program, Interstate and Intrastate Violence

The UCDP is one of the most frequently used data sets in academic research on armed conflicts. For interstate and intrastate war, the data set covers 1946–2015 and sets two levels of intensity: "Armed conflicts" have at least 25 battle deaths in given year; "wars" have at least 1,000 battle deaths per year. Conflicts with fewer than 25 battle deaths per year are not included in the database. These distinctions roughly correspond to the "low" and "medium" conflict thresholds in our conflict typology. The UCDP data do not provide enough detail to distinguish between medium- and high-intensity conflicts, although the authors of this data set also produce a battle death data set, covering 1989–2015, which provides some insight into this question for a limited number of conflicts.

The UCDP data define four types of conflict: extrasystemic, interstate, intrastate, and internationalized intrastate violence. The four types of conflict are defined as follows:

- "Extrasystemic armed conflict occurs between a state and a nonstate group outside its own territory. (In the COW project, extrasystemic war is subdivided into colonial war and imperial war, but this distinction is not used here.) These conflicts are by definition territorial, since the government side is fighting to retain control of a territory outside the state system."
- "Interstate armed conflict occurs between two or more states."
- "Internal armed conflict occurs between the government of a state and one or more internal opposition group(s) without intervention from other states."

<sup>2</sup> Lotta Themnér and Peter Wallensteen, "Armed Conflict, 1946–2010," *Journal of Peace Research*, Vol. 48, No. 4, July 2011, pp. 525–536.

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• "Internationalized internal armed conflict occurs between the government of a state and one or more internal opposition group(s) with intervention from other states (secondary parties) on one or both sides."<sup>3</sup>

Internal and interstate armed conflict definitions are fairly straightforward and correspond directly to specific cells in our typology. Extrasystemic and internationalized intrastate conflicts, however, require some additional attention. Extrasystemic wars involve states fighting groups that are not considered part of the state system, and the category includes primarily colonial and imperial wars. Internationalized intrastate conflicts involve cases where a third party intervenes or becomes involved in an ongoing intrastate conflict. Both could technically be considered types of intrastate conflict. The following figures first consider each of these two conflict types separately and then aggregate these two additional categories with other intrastate conflicts. The numbers of extrasystemic wars are fairly low, so this change does not have too much effect on the overall trends. The number of internationalized intrastate wars is also low for most years, but increased greatly in 2014–2015 and is one of the main drivers in the recent uptick in intrastate violence. As a result, keeping in mind the independent trend in internationalized intrastate conflict is important when viewing the intrastate conflict trends illustrated here. It is worth noting that each of these types of conflict includes a state actor; there are no wars between two nonstate groups. This is one limitation of the UCDP database, particularly for internal conflict. The UCDP does have a nonstate conflict database that covers the period 1980–2014. Trends in nonstate conflict are considered in a later section in this appendix.

Finally, the UCDP armed-conflict data set categorizes data by "incompatibility" or the "cause" of the conflict.<sup>4</sup> It includes three incompatibilities: conflict over territory ("concerning the status of a territory, e.g., the change of the state in control of a certain territory"), conflict over control of the government ("concerning type of political system, the replacement of the central government, or the change of its composition"), or conflict over both. This is not a dimension of conflict directly captured in our database, but because it is substantively important and relevant to a study of conflict trends, we include this dimension in our assessment.

Figures A.1 through A.10 compare trends in conflict according to the UCDP data set along three dimensions (type, intensity, and incompatibility) for the 1946–2015 period. Most show the total number of conflicts of each type and intensity occurring in a given year. Figures A.9 and A.10 show conflict onsets—that is, the number of new conflicts of each type and intensity beginning in each year.

Figures A.1 and A.2 show a picture broadly consistent with the trends described in the introduction. Overall levels of interstate and intrastate conflict have declined since their peaks,

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<sup>&</sup>lt;sup>3</sup> Themnér and Wallensteen, 2011.

<sup>&</sup>lt;sup>4</sup> For data supporting these figures, see Gleditsch, Wallensteen, et al., 2002.

<sup>&</sup>lt;sup>5</sup> Uppsala Conflict Data Project, 2012, pp. 2–3.

both for low- and medium/high-intensity violence. Low-intensity interstate conflict peaks in the 1980s, while medium- to high-intensity interstate conflict (as noted previously, the data do not allow us to separate high- and medium-intensity conflict) is most common in the 1960s and 1970s. There have been few instances of this type of conflict since 2000, and what has occurred has been primarily low intensity.

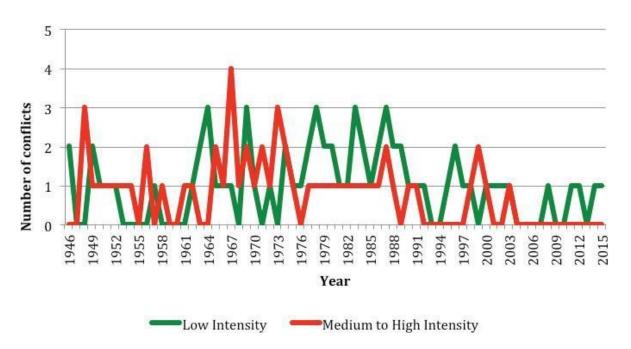


Figure A.1. Interstate Conflict, UCDP, 1946–2015

SOURCE: Uppsala Conflict Data Project, 2016.

40 30 Number of conflicts 20 10 0 1964 926 1970 973 1979 1967 1982 Year Low Intensity Medium to High Intensity

Figure A.2. Intrastate Conflict, UCDP, 1946-2015

Intrastate conflict (in this instance excluding internationalized intrastate and extrasystemic conflicts) has been significantly more frequent than interstate violence during the period under consideration, but has also declined since its somewhat later peak in the 1980s (high intensity) and 1990s (lower intensity). The downward trend in intrastate conflict for lower-intensity conflict is most pronounced in the period between 1990 and about 2002. Since 2002, there have been two upticks in the number of low-intensity intrastate conflicts, one between 2003 and 2006, and a second between 2012 and 2015. The majority of this increase has been at low intensities. The decline in higher-intensity intrastate conflict has also been noticeable since about 1990, but there was a slight increase between 2010 and 2014. The decline in intrastate conflict has been more tentative and limited, therefore, than that in interstate conflict. While there is little remaining interstate conflict, intrastate conflict continues to occur with some frequency at all intensities, particularly lower-level ones. In addition, these trends exclude internationalized intrastate conflicts, which are discussed in more detail below and have increased more substantially in recent years. It is important to place this uptick in context. First, the number of intrastate conflicts is still lower than the peak of the end of the Cold War period and the recent uptick is within the range of past fluctuations. It is too early to say that intrastate conflict is on an extended upward trend. Second, the recent increase in intrastate conflicts (e.g., excluding internationalized intrastate conflicts) is concentrated primarily in low-intensity conflicts, rather than those at higher intensity levels.

Figure A.3 focuses on extrasystemic conflict. Most common during the 1950s and 1960s as colonial wars and wars of independence, this type of conflict has been essentially nonexistent since 1975. Prior to 1975, however, it constituted a significant source of both low- and medium/high-intensity conflicts.

Figure A.4 shows the time series for internationalized intrastate conflicts. The graph shows that the total number of internationalized intrastate conflicts is relatively small compared with the total number of intrastate conflicts, but the number of medium- or high-intensity internationalized intrastate conflicts has been much larger than noninternationalized intrastate conflicts at these intensity levels in recent years. Internationalized intrastate wars were common during the 1980s, becoming somewhat less prevalent after the fall of the Soviet Union before rising consistently after 2001. They have continued to increase, rather markedly, through 2015. This trend suggests a more interventionist approach at the global level and may include interventions intended as "peacemaking" operations, as well as those in which third parties take a nonneutral stance and back one of the intrastate combatants as their proxy. Finally, unlike other conflict types, medium- and high-intensity internationalized intrastate violence is as common as low-intensity conflict. In fact, the increase in these conflicts has been so significant that it is really no longer sufficient to use intrastate conflicts alone as a proxy for internal conflict. Importantly, the magnitude of this increase in internationalized intrastate conflict is greater in the UCDP data set than in most other data sets considered in this report. In part, this stems from the way that intrastate conflicts are coded in the UCDP data and the implications of these coding rules when applied to the recent increase in conflicts involving ISIS. Specifically, when a nonstate group fighting a state declares allegiance to another group—in many recent cases, ISIS—UCDP codes both a conflict between the nonstate group and the state and then one between ISIS and the state in the year in which the transfer of allegiance occurs. This has the potential to "double-count" such conflicts in that year, and this phenomenon explains part of the increase in intrastate conflicts in the UCDP data in 2014–2015. We assume that such coding issues apply to earlier years of the data as well, and it is difficult to definitively assess how their effect on the number of conflicts identified may have changed over time. Longer-term trends, rather than short-term fluctuations, in numbers of conflicts and wars, as well as the declining numbers of people killed in these conflicts, probably provide a more reliable picture than focusing on values in any given year or a small handful of years.

Number of conflicts Year Medium to High Intensity Low Intensity

Figure A.3. Extrasystemic Conflict, UCDP, 1946–2015

Number of conflicts Year Low Intensity Medium to High Intensity

Figure A.4. Internationalized Intrastate Conflict, UCDP, 1946-2015

As noted previously, it may be useful to look at a more aggregated measure of intrastate conflict that includes both extrasystemic and internationalized intrastate conflict. Figure A.5 presents this aggregate trend and compares interstate and intrastate conflict. In general, the trends are similar to those described for Figures A.1 and A.2. Overall levels of interstate conflict have fallen close to zero and intrastate violence had also been on a significant downward trend since the mid-1980s (medium to high intensity) and the mid-1990s (low intensity) until about 2012. When looking at these aggregate trends, the recent uptick in intrastate violence since 2012 appears more significant at both low intensity and medium-high intensity. In fact, the level of aggregate intrastate conflict in 2015 is approaching the peak levels of this type of conflict at both intensity levels. This graph emphasizes that this most recent uptick is indeed significant. However, as noted above, short-term spikes may not last long and can be driven partially by coding issues related to counting conflicts involving ISIS. The graph also makes clear the extent to which global conflict is dominated by intrastate violence.

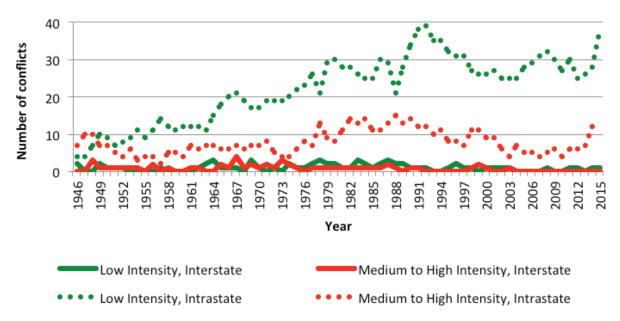


Figure A.5. Interstate v. Intrastate Conflict (Aggregated), UCDP, 1946-2011

All conflicts in the UCDP data set are "caused" by two incompatibilities: government and territory, either singly or by both simultaneously. Figures A.6 through A.8 show how the frequency of each incompatibility has varied over time across conflict types and intensities of violence. In other words, these graphs show how the "causes" of conflict have changed over time. Figure A.6 shows trends in primary incompatibility for interstate conflict. Territorial incompatibilities are far more common than government incompatibilities for interstate conflicts. High-intensity territorial conflicts were most common in the 1970s, while low-intensity territorial conflict became much more likely in the 1980s. Since the early 1990s, however, interstate conflict at both intensities and all incompatibilities has fallen close to zero.

Figure A.7 focuses on intrastate conflict. Low-intensity territorial conflicts are the most common over much of the period under consideration, but conflicts motivated by competition over control of government increased in the mid-1980s. Since then, however, low-intensity conflicts motivated by territorial disputes have become increasingly common, especially since 2009. In fact, the majority of the recent increase in intrastate conflict seems to have been concentrated in low-intensity conflict motivated by territorial disputes. At the medium- to high-intensity level, however, conflicts motivated by government disputes have been more common than those motivated by territory and also appear to have increased in frequency since 2009. As already noted, a large number of new internal conflicts, particularly at higher intensities, are in fact internationalized intrastate conflicts.

There are also some interstate conflicts that have both territorial- and government-related incompatibilities that drive armed conflict (see Figure A.8). These conflicts are relatively few in number and were most common in the 1950s, 1970s, and 1980s (with the highest intensity concentrated in the 1980s).

Figure A.6. Interstate Conflict by "Incompatibility" and Type, UCDP, 1946 –2011

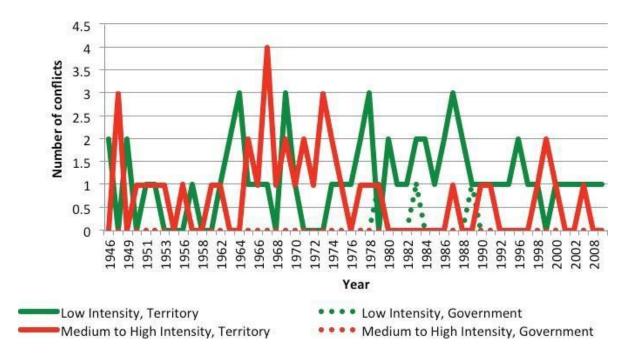


Figure A.7. Intrastate Conflict (Aggregated) by "Incompatibility" and Intensity, UCDP, 1946 -2015

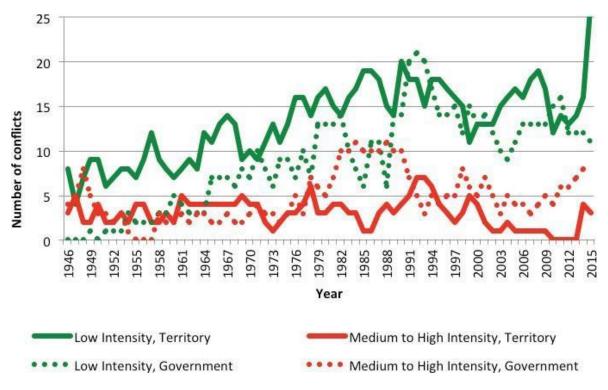
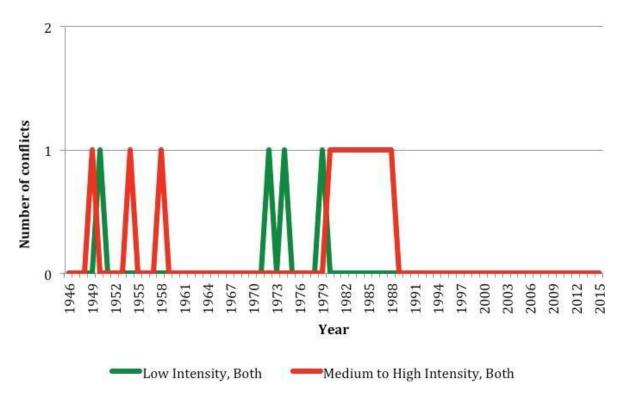
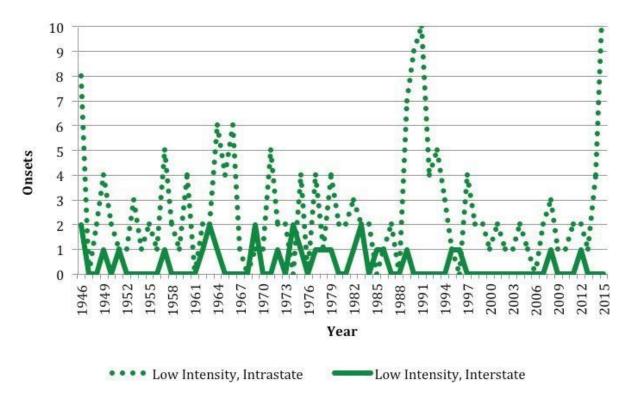


Figure A.8. Interstate Conflict with Both Territory and Government Incompatibility, UCDP, 1946–2015



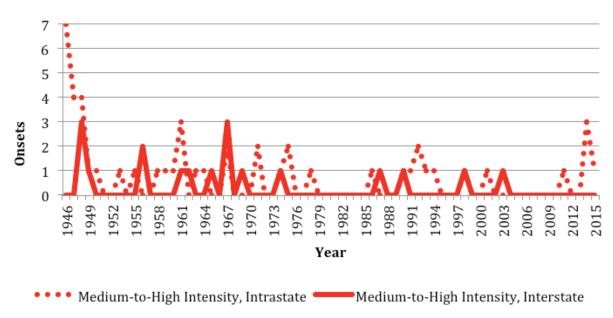
Finally, in addition to analyzing numbers of ongoing conflicts, we can also track trends in the onset of new conflicts over time. If trends in conflict are driven by new onsets, then the number of new onsets should be high and close to the total number of ongoing conflicts in any one year. If trends in conflict are driven by enduring conflicts, then overall conflict onsets may be low, even as the total number of conflicts remains high. Figures A.9 and A.10 show that the number of interstate onsets has been low throughout the observation period for both levels of intensity, usually two or fewer per year and most common in the 1960s through the 1980s. High-intensity intrastate onsets have also been relatively infrequent since the 1990s but seem to have increased since 2012. Low-intensity intrastate onsets have been much more common, highest in the 1960s and reaching a sharp peak in the late 1980s and early 1990s, following the end of the Cold War. Between 2000 and 2013, the number of low-intensity onsets was relatively limited. However, there has been a significant increase in low-intensity intrastate onsets in 2014–2015.

Figure A.9. Conflict Onsets, Low Intensity, UCDP, 1946-2015



SOURCE: Uppsala Conflict Data Project, 2016. NOTE: Onset intensity is intensity at onset point.

Figure A.10. Conflict Onsets, Medium to High Intensity, UCDP, 1946-2015



SOURCE: Uppsala Conflict Data Project, 2016. NOTE: Onset intensity is intensity at onset point.

#### Correlates of War

The COW was one of the first conflict data sets created and is also one of the most comprehensive in terms of the period of time covered. The data cover wars between 1816 and 2007 and set a threshold for inclusion, counting as "war" only conflicts with 1,000 battle deaths in a 12-month period. This relatively high threshold excludes a large number of low-intensity conflicts that are captured in the UCDP data. This is a disadvantage of using the COW data set, especially since the low-intensity conflicts appear to be growing relatively more likely and thus more important to the study of armed conflict in recent years.<sup>6</sup>

In addition to its battle-death threshold, the COW data set also includes a number of other criteria that apply to specific wars. For intrastate conflicts, "(a) both sides [must be] initially organized for violent conflict and prepared to resist the attacks of their antagonists, or (b) the weaker side, although initially unprepared, [must be] able to inflict upon the stronger opponents at least five percent of the number of fatalities it sustains." Finally, the COW data set also defines a mobilization threshold, a certain minimum level of participation that actors must reach in order to be counted as participants in the war. For states to be considered participants, they must experience 100 battle deaths or commit 1,000 troops. The COW data set, therefore, does not include low-intensity violence as we define it for our typology. However, it does provide the fatality data needed to distinguish between medium- and high-intensity conflicts.

The COW data count four types of conflict: interstate, intrastate, extrastate, and nonstate violence. Interstate violence involves one government against another government, both members of the international system. Intrastate war includes primarily conflicts between states and nonstate actors within a single country, as well as communal wars between nonstate actors and regional conflicts between a regional subunit and the state fighting within the territory of one state. Extrastate conflicts include imperial and colonial conflicts between a state and an entity not considered a part of the state system, akin to the extrasystemic conflicts defined in the UCDP data set. Nonstate conflicts include two specific types of conflict: conflicts between nonstate entities fighting in a nonstate territory and nonstate wars that take place across borders.

Figures A.11 through A.14 show total numbers of ongoing conflicts by type and intensity as recorded in the COW data set between 1946 and 2007. It is worth noting that the intensities depicted in the COW graphs in this appendix show average battle deaths per year in the conflict. We do not show the full data set (from 1816) because our other data rarely start before 1946 and our focus is on this post–World War II period. Figures A.11–A.13 disaggregate interstate, intrastate and extrastate conflict. Figure A.14 combines extrastate with intrastate conflict. The trends in nonstate conflict are considered in a later section of this appendix.

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<sup>&</sup>lt;sup>6</sup> For COW data supporting these figures, see Meredith Reid Sarkees and Frank Whelon Wayman, *Resort to War: A Data Guide to Inter-State, Extra-State, Intra-State, and Non-State Wars, 1816–2007*, Washington, D.C.: CQ Press, 2010; Also see Meredith Reid Sarkees, "The COW Typology of War: Defining and Categorizing Wars" (Version 4 of the Data) in note with version 4 of the *Correlates of War Data*, 2010.

<sup>&</sup>lt;sup>7</sup> Melvin Small, Joel David Singer, and Robert Bennett, *Resort to Arms: International and Civil Wars, 1816–1980*, Vol. 4, Beverly Hills, Calif.: Sage Publications, 1982.

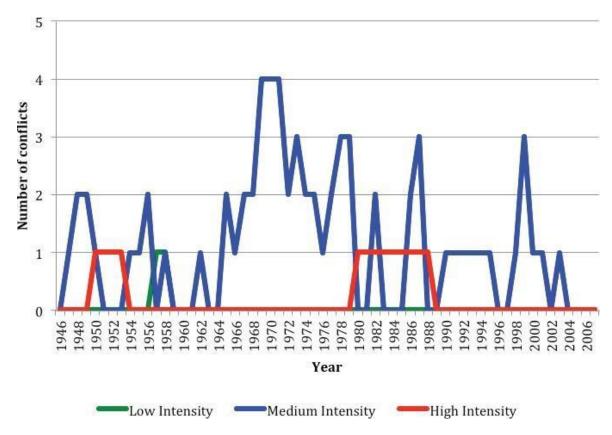


Figure A.11. Interstate Conflict, COW, 1946-2007

The trends in interstate conflict revealed by the COW data set confirm patterns seen in the UCDP data. Interstate conflict is not all that frequent over the period under consideration, and seems to have become even less frequent after the 1980s. Conflicts seem most likely in the 1970s and 1980s for both medium- and high-intensity violence. Medium-intensity conflict is more likely over the period as a whole. Largely because of the high threshold for inclusion, there is only one low-intensity interstate conflict included in the COW data set. Although the incidence of interstate conflict does appear to be less frequent now than in the past, this graph makes it clear that interstate wars have not entirely disappeared, even at the end of the observation period and especially at medium intensities.

Trends in intrastate conflict according to the COW data, shown in Figure A.12, show that most conflicts captured by this data set fall into the medium-intensity category and the number of these conflicts rose from the early 1960s, peaking in 1991 before falling during the later 1990s and early 2000s. In 2007, however, there are only two of these conflicts remaining. High-intensity intrastate conflict is very uncommon according to the COW data, existing only in 1946–1950. This suggests that few intrastate conflicts are able to maintain a fatality level of 100,000 deaths per year (although some may have 100,000 in one year, a pattern that would not

be captured by the data that we have). Low-intensity intrastate conflict was most common during two periods of time—in the 1990s and early 2000s, and during the 1970s and 1980s. The number of these conflicts also seems to have decreased since 2000. It is worth noting that because the COW data stops in 2007, it does not capture the recent uptick in violence noted in the discussion of the UCDP data.

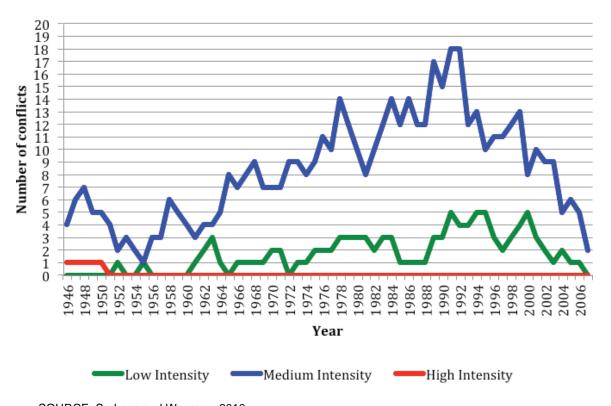


Figure A.12. Intrastate Conflict, COW, 1946-2007

SOURCE: Sarkees and Wayman, 2010.

An important note when comparing COW and UCDP intrastate violence is that while the UCDP data include only conflicts involving one state, the COW data do include some communal conflict, which may involve two nonstate parties fighting within a single state. This is increasingly relevant in our discussion of nonstate conflict.

Trends in extrastate conflict (Figure A.13) suggest that this type of conflict has been largely medium intensity, reaching a peak in the early 1980s. Medium-intensity extrastate conflict has also increased again since 1998 and through 2007. However, it remains well below its peak. Low-intensity extrastate conflict has been relatively infrequent but has been increasing since 2000. High-intensity intrastate violence has been infrequent and nonexistent since 1975.

Number of conflicts 1980 1982 1984 1966 1988 Year Low Intensity Medium Intensity High Intensity

Figure A.13. Extrastate Conflict, COW, 1946-2007

Figure A.14 compares levels of intrastate and interstate conflict as reported in the COW data set. Intrastate conflict is more common than interstate conflict, particularly at medium intensities and after 1960. Low-intensity interstate conflict has also been less common than low-intensity intrastate conflict. This is consistent with trends observed in low-intensity intrastate violence already noted. High-intensity interstate and intrastate violence are both very uncommon throughout the period under consideration in this data set.

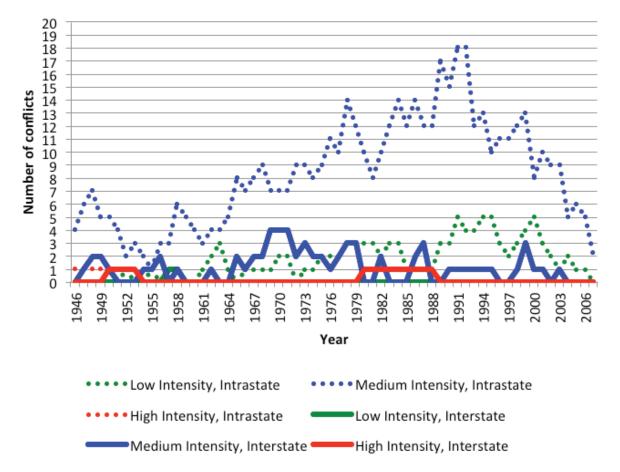


Figure A.14. Interstate v. Intrastate Conflict, COW, 1946-2007

Our final figures using the COW data in this section consider conflict onsets. Trends in intrastate conflict onsets (Figure A.15) show that new conflicts of both medium- and low-intensity violence were most likely in the late 1970s and 1990s and have been declining since. High-intensity onsets have been essentially nonexistent since about 2000, and medium-intensity intrastate conflicts have been consistently more common than low-intensity conflict. Interstate conflict onsets (Figure A.16) also have been infrequent at all intensities during the period under consideration, being most common in the 1970s, 1980s, and immediately after the Cold War. The uptick in onsets of medium-intensity conflicts around 2000 reflects the start of the wars in Afghanistan and Iraq. Throughout the period under consideration, most interstate onsets have been at the medium-intensity level. Interestingly, the overall trend in interstate onsets is one of ebbs and flows over the past 65 years, suggesting that although we have not seen any new onsets recently, that does not mean we won't see additional onsets in the future. In fact, past patterns would suggest that interstate conflict will continue to occur, albeit at a lower rate.

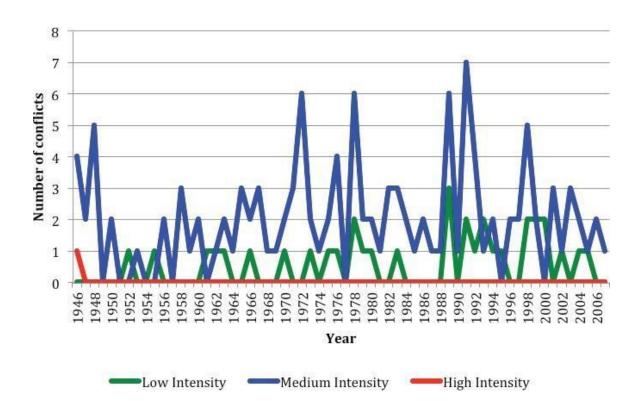


Figure A.15. Conflict Onsets, Intrastate (Aggregate), COW, 1946–2007

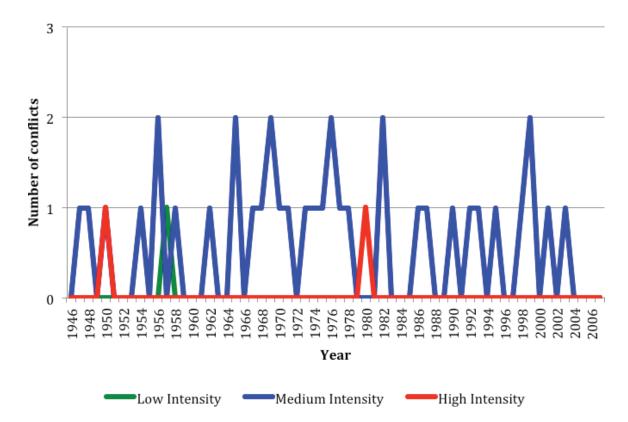


Figure A.16. Conflict Onsets, Interstate, COW, 1919-2007

## Political Instability Task Force

The PITF collects data on a number of different types of events that may be associated with overall state instability, collapse, and failure, including several types of intrastate conflict, two of which are similar to the intrastate conflicts collected by the COW and UCDP data sets. These include data sets on revolutionary wars between political groups and wars between ethnic groups. The PITF defines two thresholds for event identification: "There are the two minimum thresholds for including a political conflict in the state failure problem set: a mobilization threshold, wherein each party must mobilize 1,000 or more people (armed agents, demonstrators, troops), and a conflict intensity threshold, whereby there must be at least 1,000 direct conflictrelated deaths over the full course of the armed conflict and at least one year when the annual conflict-related death toll exceeds 100 fatalities. The fatalities may result from armed conflict, terrorism, rioting, or government repression."8

The PITF data cover the period from 1948 through 2015 and include both conflicts that involve a state and a nonstate group and those that involve several nonstate groups, but no state

<sup>&</sup>lt;sup>8</sup> Marshall, Gurr, and Harff, 2012.

actor. This combines two categories in our typology, and is more similar to the coding used by the COW data than the UCDP data. The PITF data rank the intensity of war on a scale between 0 and 4 based on combat-related deaths. The PITF is a valuable supplement to the UCDP and COW data sets because it disaggregates civil and ethnic intrastate violence, providing additional details on the causes or incompatibilities that may affect trends in intrastate conflict.

The calibration of the PITF index and its translation into our database is illustrated in Table A.5. The match with our typology is not perfect. As was the case for the UCDP data, we cannot distinguish between the more-severe medium- and high-intensity violence because the highest-fatality category is only 10,000 deaths per year.

**Table A.5. PITF Conflict Intensity** 

Conflict-Related Fatalities Per Year PITF Inc		Conflict Typology Intensity	
0–100	0	Low intensity	
100-1,000	1	Low intensity	
1,000-5,000	2	Medium intensity	
5,000-10,000	3	Medium intensity	
Over 10,000	4	Medium to high intensity	

SOURCE: Marshall, Gurr, and Harff, 2012.

We may expect the PITF trends in revolutionary and ethnic war to vary slightly from those observed in the UCDP and COW data sets. First, the PITF data have a lower threshold for inclusion than the COW data and so may include more conflicts. Second, the PITF data have a higher threshold than the UCDP data, so they may exclude violence that is captured in UCDP intrastate data trends. The PITF data also disaggregate ethnic and revolutionary violence, providing a more fine-grained trend for two types of intrastate conflict. Trends in ethnic and revolutionary intrastate wars in Figures A.17 and A.18 are similar in shape to those for aggregated intrastate violence produced by the UCDP and COW data. The total number of intrastate conflicts (combining revolutionary and ethnic conflict) is slightly less than that recorded by the UCDP data, as expected. Medium- and high-intensity revolutionary and ethnic conflict are most common, a trend that is particularly strong for revolutionary violence. Mediumto high-intensity revolutionary violence peaks in the late 1970s and again in the late 1980s and early 1990s, falling after 1993 and the dissolution of the Soviet Union and Yugoslavia. However, rather than declining to zero, this type of violence experiences a slight rebound between 1996 and 1999 and another increase between 2005 and 2010. Since then, medium- to high-intensity

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<sup>&</sup>lt;sup>9</sup> Marshall, Gurr, and Harff, 2012.

 $<sup>^{10}</sup>$  Later in this appendix, we will aggregate both forms of conflict and compare the PITF intrastate conflict data with COW and UCDP intrastate data.

revolutionary violence fell in 2011 but rose again immediately in 2012. Low-intensity revolutionary conflict peaks in the early 1980s and mid-1990s, before declining slightly until about 2000 and then plateauing. Since 2008, however, this type of violence has increased rather steadily. Although both forms of violence have fallen since their peak, neither medium- nor low-intensity revolutionary war appears to be following an unambiguous downward trend.

The same can be said for ethnic conflict. Although Figure A.17 suggests a decline in both medium-to-high— and low-intensity conflict since their peaks in the early 1990s, recent trends show at least stability and possibly some increase in the number of ongoing ethnic wars. Medium-to-high-intensity ethnic conflict peaked in the early 1990s and was the more common level of intensity prior to about 2002. While this type of violence decreased until 2005, it has increased several times since then, including a recent spike since 2010. Since 2002, however, low-intensity ethnic conflict has been more common than higher-intensity ethnic conflicts. After a rapid increase in 2000, it remained elevated, with peaks in 2002 and 2011, before declining slightly in recent years. According to this data, ethnic war at both low and medium to high intensities does not follow the global decline in conflict observed in the aggregate or in other types of conflict.

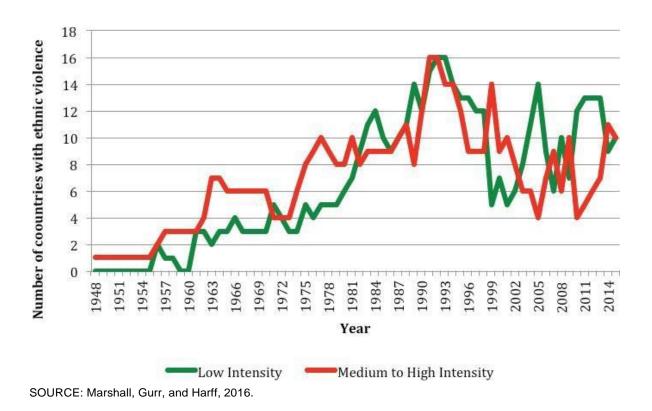


Figure A.17. Ethnic War, PITF, 1948-2015

165

14 Number of countries with revolutionary 12 10 8 violence 6 4 2 8/61 1993 066 1984 1981 Year Medium to High Intensity Low Intensity

Figure A.18. Revolutionary War, PITF, 1948-2015

SOURCE: Marshall, Gurr, and Harff, 2016.

Overall, the PITF data suggest that both ethnic and revolutionary violence have followed the general downward trend observed for intrastate conflict in the aggregate. However, this decline has not been the same for all intensities of violence. The declines in medium-to-high-intensity conflict and revolutionary conflict have been stronger than those at lower intensities and for ethnic violence.

## Major Episodes of Political Violence

Unlike other data sets that track trends in conflict over time, the MEPV data set does not count individual instances of conflict. Instead, it codes the level of interstate and intrastate violence for each country for each year on a scale of 1–10, taking into account the scope of the violence, total fatalities caused by the conflict (including civilian), and other factors, such as population displacement. To be included in the data set, an episode of violence must have at least 500 directly related deaths (base rate of 100 per year). Episodes considered include not only wars, but also genocide and terrorism. The data set covers the period 1946–2015, and codes two levels of conflict: violence and war. The ten-point coding scale used by the MEPV, along with examples provided by the data set's authors, are included in Table A.6. If there are several ongoing conflicts within a country in a given year, then total "score" received for that country-

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<sup>&</sup>lt;sup>11</sup> Marshall, 2010.

year will equal the sum of the intensity scores assigned to each episode. For the purpose of this analysis, we have roughly translated this coding scheme into our three levels of intensity (also shown in Table A.6) and counted the number of conflicts of each type at each level of intensity ongoing in each year. It was somewhat challenging to map our conflict intensities, which were set using battle deaths, onto the MEPV categories, which are based on a more broadly defined set of "directly related deaths" associated with the conflict. To get a sense of how MEPV categories might compare to other data sets that do use battle deaths, we matched a number of conflicts that appear in the MEPV and others already described (COW, UCDP)—for example, the Iran-Iraq War, Turkey 1984-present, the Soviet-Afghan war, and several others. This allowed us to calibrate the different data sets with our conflict intensity categories.

Table A.6. MEPV Conflict Intensity Definitions

MEPV Index Code	Example	RAND Typology Intensity
10 Extermination and annihilation	Germany and Soviet Union 1941–1945, nuclear bombs	High intensity
9 Total warfare	Germany and Soviet Union 1941–1945	High intensity
8 Technological warfare	World War I	High intensity
7 Pervasive warfare	Afghanistan, Vietnam, Rwanda 1994	High intensity
6 Extensive warfare	Iran-Iraq, Bosnia 1992–1995, Sudan, 1983–present	Medium intensity
5 Substantial and prolonged warfare	Lebanon 1975–1991; Sri Lanka; Somalia 1988-present	Medium intensity
4 Serious warfare	Israel 1967–1970	Medium intensity
3 Serious political violence	Chile 1957–1959; Turkey 1984-present	Low intensity
2 Limited political violence	Georgia 1991–1993; Cuba 1957	Low intensity
1 Sporadic or expressive political violence	Moldova 1991–1997; Argentina-UK 1982	Low intensity

The MEPV disaggregates conflict into interstate violence and war, intrastate violence and war, and independence-related violence and war (mostly colonial conflicts in the 1960s and 1970s). It further breaks intrastate violence into civil violence and war (between political actors, or between the state and a political group) and ethnic violence and war (a conflict between two ethnic groups, one of which may be represented by the state). Within intrastate war, however, it does not distinguish between violence involving a state and nonstate actor, involving two nonstate actors, or by a state or nonstate actor on its own, which are all separate categories within our conflict typology. The MEPV also aggregates violence between two actors and one-sided violence, which are also split into different cells in our typology.

The MEPV data set has both advantages and disadvantages compared with other data sets. The MEPV data set captures conflict and political violence in a country more comprehensively than other data sets because it does not set thresholds but instead captures all violence in its

index. At the same time, however, this means that it aggregates a number of types of violence that we separate in typology, including conflict, terrorism, and genocide. The higher level of aggregation places some limit on our understanding of trends in intrastate conflict compared with the picture we can glean from other, more—finely coded data sets. It also means that the total levels of violence reported by the MEPV data for any given year may be significantly higher than levels reported by other data sets, which consider wars separately from events such as genocide and terrorism. The use of an index to measure intensity also has some drawbacks, including the potential for coder subjectivity, opacity, or inconsistency. It is also difficult in some cases to compare conflicts or violent episodes when using indexes rather than raw data. The comprehensive nature of the data, however, may offset these disadvantages in many cases.

Figures A.19 and A.20 show trends in conflict as reported in the MEPV data set. Figure A.19 shows an overall downward trend in the frequency of interstate conflicts as measured by the MEPV data set. Over the period shown in the graph, low-intensity interstate conflict is the most common level of violence in the 1960s and 1970s, but medium intensity is the most common in the 1980s. High-intensity violence is somewhat less common, and occurs with declining frequency after the early 1970s. More recently, low-intensity interstate violence has remained at low levels, while medium- and high-intensity conflicts have declined close to zero. Wars in Iraq and Afghanistan and related military engagements have had some effect, increasing levels of interstate violence slightly and temporarily. Although there are no ongoing interstate conflicts as of 2015 in the MEPV data set, the trend lines make clear that while interstate conflict is rare, it has not yet been eliminated.

Trends in intrastate violence (Figure A.20), according to the MEPV data set, suggest a significant decline in low-intensity conflict and a smaller decline in high-intensity conflict, but almost no change in medium-intensity intrastate conflict since their peaks in the 1980s (medium and high intensity) and 1990s (low intensity). Intrastate violence increases at all intensities over the 1970s, 1980s, and early 1990s. After 1991, high-intensity intrastate conflict declines close to zero. Low-intensity conflict also declines significantly in absolute terms, but plateaus after 2000 and remains at significant levels, never falling to fewer than ten ongoing conflicts per year and rising slightly in more recent years. There is little change in rates of medium-intensity intrastate conflict, a trend similar to that seen in several previous graphs, and it too remains at around ten conflicts per year. Like low-intensity intrastate conflict, medium-intensity intrastate conflict has increased slightly since 2012. However, it is important to note that even with recent increases, intrastate violence remains well below peak levels and well within the historic average. Unlike other forms of violence, then, low- and medium-intensity intrastate conflict remain significant and do not appear to be declining or disappearing.

Number of countries with interstate conflict Year Medium Intensity High Intensity Low Intensity

Figure A.19. Countries with Interstate Conflict, MEPV, 1946-2015

SOURCE: Marshall, 2016.

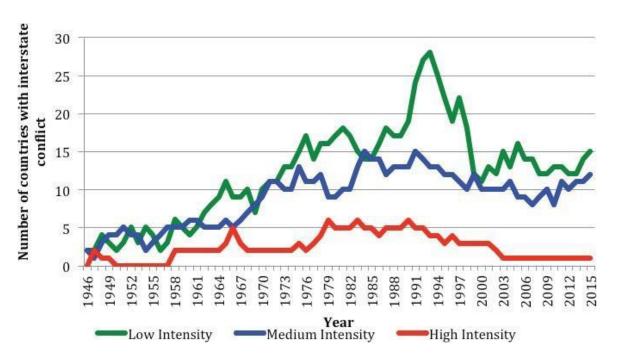


Figure A.20. Countries with Intrastate Conflict, MEPV, 1946–2015

SOURCE: Marshall, 2016.

Conflicts related to wars of independence (Figure A.21) occur only at low and medium intensity and are concentrated in the 1950s through 1970s. These wars could be reclassified as "intrastate" violence, and would increase the total number of intrastate conflicts observed in these decades, but not the overall trend in intrastate conflict, especially for recent years. Wars of independence appear to have been localized in time and a function of the collapse of colonial empires. It is interesting to think about whether there are institutional structures in today's global system that might drive a similar set of conflicts in the medium or long term.

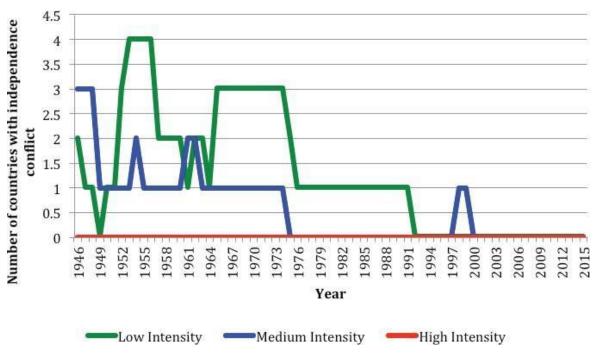


Figure A.21. Countries with Independence Conflict, MEPV, 1946–2015

SOURCE: Marshall, 2016.

Finally, we can compare civil and ethnic violence as recorded by the MEPV data set. Civil conflict will be similar to the revolutionary conflict coded by the PITF data, and the two data sets also can be compared along ethnic conflict lines. Figures A.22 and A.23 show that trends in the two types of intrastate conflict are similar, but not identical. Low-intensity civil conflict peaks around 1980, then falls consistently until the later 1990s, after which it remains fairly constant until declining again after 2001. In recent years, low-intensity civil conflict has increased somewhat. Medium-intensity civil violence peaked around 1990, and high-intensity civil conflict was most common in the 1960s. Overall, there is some evidence of a downward trend in civil conflict at high and moderate levels of intensity, but an increase at low intensities. In fact, much of the recent increase in intrastate violence seems to be in low-intensity civil conflict.

Turning to the MEPV's picture of ethnic conflict, although less common than civil violence through the 1960s, in the 1970s the number of ethnic conflicts, particularly those of low intensity, rose sharply. Today, ethnic conflict remains the more common and more persistent form of intrastate violence, especially at low intensities. Figure A.23 shows that low-intensity ethnic conflicts were more common than other levels of intensity throughout the 1970s, 1980s, and 1990s. The number of low-intensity ethnic conflicts peaked in the early 1990s, before falling by 2001 and then increasing fairly steadily since 2003. Medium-intensity ethnic conflict has remained more stable over the entire period, even increasing in recent years, and also does not exhibit a downward trend. As was true for civil violence, high-intensity ethnic conflict is infrequent after 1980. The disaggregated view of trends in ethnic conflict show that it remains at moderate levels (above either civil conflict or interstate war) and does not appear to be following the strong downward trend observed at the global level.

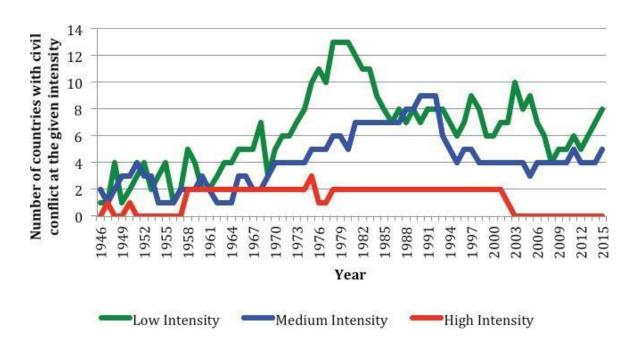


Figure A.22. Civil Conflict, MEPV, 1946-2015

SOURCE: Marshall, 2016

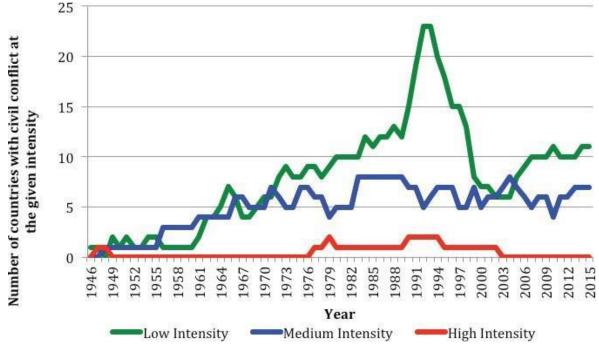


Figure A.23. Ethnic Conflict, MEPV, 1946-2015

SOURCE: Marshall, 2016.

# Summary: Comparison Across Data Sets

This section has described a number of different databases relevant to the study of conflict trends. Each defines conflict in a slightly different way and focuses on a slightly different type of political violence. This section draws some comparisons between the different data sets and shows that although the different databases do vary in the number of conflicts they record in each year, the overall trends in conflict are the same, regardless of which data set we consider.

### Interstate Wars

Figure A.24 shows the total number of interstate conflicts coded by the COW and UCDP data sets and the number of countries involved in interstate conflicts coded by the MEPV data. As alluded to several times, all data sets show the same general trend: several decades of relatively high levels of interstate violence (particularly the 1970s and 1980s), with significant declines since the end of the Cold War. The UCDP and COW data are similar in both trend and level, with the UCDP data capturing slightly more conflict because the threshold is lower than for the COW data.

The MEPV data follows the same general trend, but is at a much higher level for several reasons. First, it reports numbers of countries involved in conflict rather than the number of conflicts. The MEPV level of conflict is also higher because it has a lower threshold and because the MEPV data includes some types of events that are explicitly excluded by other data sets. For

example, the MEPV's interstate violence classification includes events such as the September 11 al Qaeda attacks, the Bay of Pigs crisis, border disputes between Honduras and Nicaragua, and the Israeli-Hezbollah conflict, none of which are counted in the other data sets. In addition, the MEPV codes intensity by aggregating violent episodes, rather than providing per-conflict estimates. This difference has several implications. On the one hand, the MEPV data give us a much more complete picture of the total amount of interstate violence in the system at any given time. On the other hand, the MEPV approach may overstate the size or scope of any decrease in interstate conflict by somewhat inflating the amount of violence reported in the past. From the perspective of this project, the most important thing is that all three data sets agree that interstate conflicts have become much less frequent since 1990 and also that this type of violence, especially at low intensities, has not entirely disappeared.

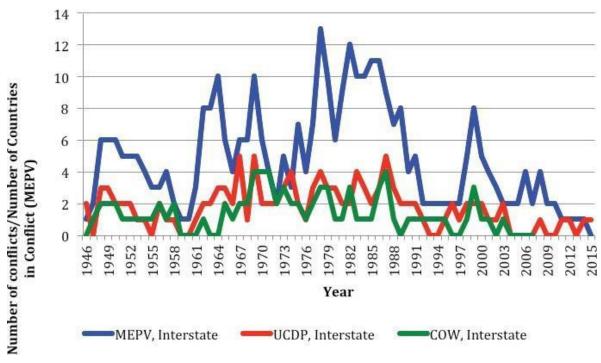


Figure A.24. Interstate Violence, Across Data Sets, 1946-2015

SOURCE: Marshall, 2016; Uppsala Conflict Data Project, 2016; Sarkees and Wayman, 2010. NOTE: COW data set only goes through 2007.

Figure A.25 shows the MEPV, COW, and UCDP database counts of ongoing high-intensity interstate conflicts per year. The COW and UCDP high-intensity conflict lines are similar in trend but different in level. As noted previously, the UCDP data do not support a disaggregation between medium and high intensity. As a result (and as expected), the UCDP trend line is generally above the COW high-intensity trend line. However, both data sets show the overall decline in high-intensity conflicts over time and almost no incidence of this type of violence after

1990. The MEPV data set shows a lower level of high-intensity interstate conflict but similarly makes the point that interstate violence has become less frequent.

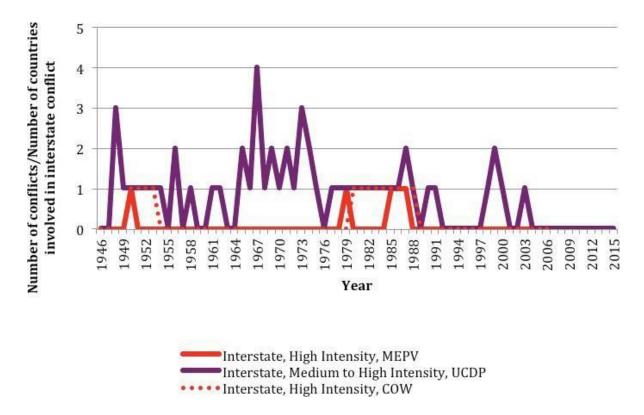


Figure A.25. High-Intensity Interstate Wars, Across Data Sets, 1946-2015

SOURCE: Sarkees and Wayman, 2010; Uppsala Conflict Data Project, 2012; Marshall, 2010. NOTE: COW data only goes through 2007.

Figure A.26 makes the same comparison for medium-intensity interstate violence. Once again, the MEPV data shows a higher level of medium-intensity violence than COW and UCDP data sets. The reasons for this are largely the same as already discussed—namely, the inclusion of civilian casualties when assigning violence index scores and the aggregation of all violence within a country in a given year into a single metric. The difference is particularly notable in the 1980s, where the MEPV data suggest a much higher level of conflict than either the UCDP or COW data sets. At other points, the MEPV data do not diverge much from the other databases. The UCDP and COW data are more similar, in numbers of conflicts and trend, although there are still some divergences because of coding differences and the fact that the UCDP data combine high- and medium-intensity conflict.

Figure A.27 shows trends in interstate violence at low intensities for the same three data sets. Once again, the MEPV data capture more low-intensity conflicts than the UCDP data because of the way the MEPV data set codes violence and the fact that it uses an aggregate country-year

indicator. However, the UCDP and MEPV data still follow similar trends rising in the 1970s and 1980s and falling after the end of the Cold War. Both also show a slight increase in the late 1990s and early 2000s. As noted previously, due to the high threshold for inclusion in the COW data, there is only one low-intensity interstate conflict in this data set.

Number of conflicts/Number of countirs with interstae conflict Year Interstate, Medium Intensity, MEPV Interstate, Medium to High Intensity, UCDP Interstate, Medium Intensity, COW

Figure A.26. Interstate Wars, Across Data Sets, Medium Intensity, 1946-2015

SOURCE: Sarkees and Wayman, 2010; Uppsala Conflict Data Project, 2012; Marshall, 2010. NOTE: COW data goes only through 2007.

13 Number of conflicts/ Number of countries 12 11 10 with interstate conflicts 9 8 7 6 5 4 3 2 2000 2003 1982 997 Year Interstate, Low Intensity, MEPV Interstate, Low Intensity, UCDP Interstate, Low Intensity, COW

Figure A.27. Interstate Wars, Across Data Sets, Low Intensity, 1946–2015

SOURCE: Marshall, 2010; Uppsala Conflict Data Project, 2012. NOTE: COW data goes only through 2007.

For interstate violence overall, all three databases suggest some common patterns and observations, although there are some differences. First, interstate wars at medium intensities were more likely in the 1970s and 1980s than in the 1990s. Second, the incidence of medium-intensity conflict falls after 1990 and remains low throughout the remainder of the observation period, with the exception of a spike at the tail end of the 1990s. However, all three data sets also make it clear that while medium- and low-intensity violence are less frequent, they have not been eliminated. Because they do capture slightly different aspects of conflict, it might make sense to consider the trends revealed in more than one database when providing an overall description of changes in conflict intensity and incidence over time.

#### **Intrastate Conflict**

Trends across data sets are even more similar for intrastate conflict. Figure A.28 shows the total number of intrastate conflicts coded by each of the different data sets. <sup>12</sup> All four databases, the UCDP, MEPV, PITF (combining counts of revolutionary and ethnic conflict), and the COW, follow the same general trend: The incidence of intrastate conflict increases steadily over the period from 1946 to about 1991, falls consistently until about 2001, and then plateauing or

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 $<sup>^{12}</sup>$  For the UCDP and COW data, the trends shown are the aggregated intrastate conflict trends.

gradually increasing. As noted previously, the latest increase includes mainly low-intensity conflicts, though there has also been a sharp increase in medium- to high-intensity internationalized intrastate conflicts. The COW data set codes the fewest intrastate conflicts, as expected because of its higher threshold for inclusion. The levels of violence coded by the MEPV, UCDP, and PITF data sets show similar trends and levels of intrastate violence. While the use of the different conflict databases to track trends in intrastate conflict still has the advantage of providing a more comprehensive picture of trends in intrastate conflict, the similarity across all four data sets gives us some confidence in the robustness of our typology in capturing the evolution of intrastate conflict over time and in the observations made about intrastate conflict in this section.

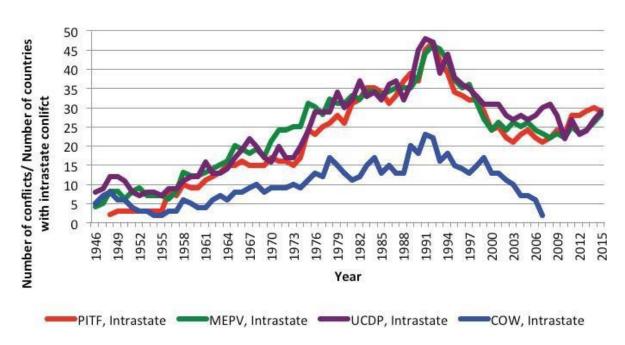


Figure A.28. Intrastate Conflicts and Wars, 1946-2015

SOURCE: Marshall, Gurr, and Harff, 2016; Marshall, 2016; Uppsala Conflict Data Project, 2016; Sarkees and Wayman, 2010.

NOTE: COW data goes only through 2007. PITF data starts in 1948.

Figure A.29 considers high-intensity conflicts in the MEPV and COW data and combined high- and medium-intensity violence reported by the UCDP data. The MEPV and UCDP data sets show nearly identical levels and trends in conflict in this case. All three show a clear peak in high-intensity intrastate violence in the 1980s, and a gradual decline after 1990 through the end of the observation period. The COW data include the fewest total high-intensity conflicts. However, it is important to note that the UCDP trend includes medium- and high-intensity conflict. As noted previously, much of the recent increase in medium- and high-intensity intrastate violence is driven by internationalized intrastate conflicts. Finally, as noted above,

MEPV defines and codes violence in a slightly different way, reports countries in conflict rather than numbers of conflict, and aggregates the intensity of all conflict within a country when reporting violence intensity.

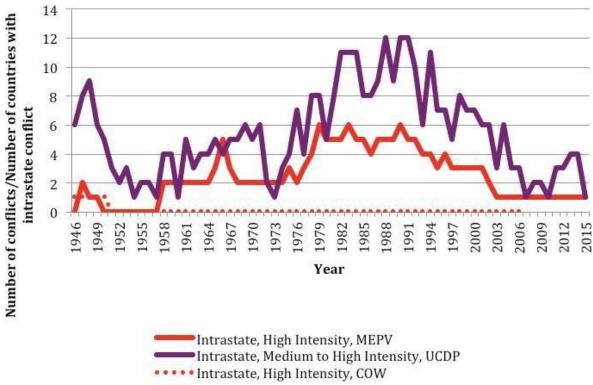
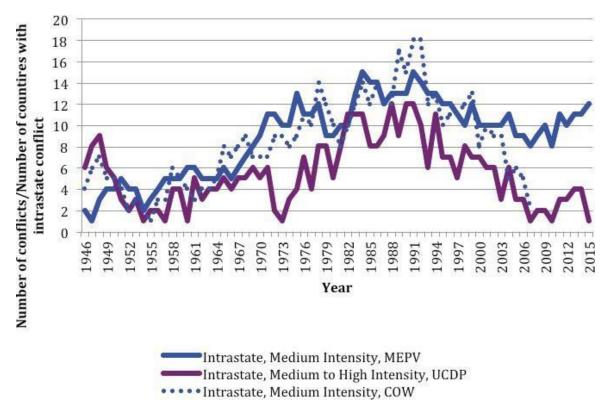


Figure A.29. Intrastate Wars, Across Data Sets, High Intensity, 1946–2015

SOURCE: Sarkees and Wayman, 2010; Uppsala Conflict Data Project, 2016; Marshall, 2016. NOTE: COW data goes only through 2007.

Figure A.30 shows trends for medium-intensity intrastate violence. Although there are some small differences, the three lines follow a largely similar trend, rising to a peak in the 1980s and declining afterward. In this case, the COW and MEPV data capture more conflict than the UCDP data over time. The MEPV data also shows a substantially higher level of medium-intensity intrastate violence after 1990 than do either of the other two data sets, largely due to the coding rules and differences noted multiple times. In addition, the MEPV data captures the post-2009 increase reported previously in this report whereas the COW and UCDP data do not capture the increase at this intensity level, with much of the post-2013 increase in the UCDP data occurring in internationalized intrastate conflicts.

Figure A.30. Intrastate Wars, Across Data Sets, Medium Intensity, 1946-2015



SOURCE: Sarkees and Wayman, 2010; Marshall, 2016; Uppsala Conflict Data Project, 2016. NOTE: COW data goes only through 2007.

Finally, Figure A.31 compares the UCDP, COW, and MEPV data sets and their coding of low-intensity intrastate conflicts. Once again, the trends and levels of conflict are very similar across data sets. The UCDP and MEPV data sets include a larger number of conflicts in this case, likely because they have a lower battle-death threshold. The MEPV and UCDP data sets show similar trends in low-intensity intrastate violence: an increase to the 1990s, a decrease through 2000, an increase to 2006 followed by a decrease to 2009, and then another increase to 2015—evidence of the recent uptick in low-intensity intrastate conflict already noted elsewhere. The magnitude of this increase is greater in the UCDP data set. An important caveat on this trend, however, is the potential bias introduced by measurement error, discussed in the introduction. Specifically, reporting on low-intensity intrastate violence has almost certainly increased over the 1946–2015 period considered here. This improved reporting could increase the number of conflicts included in the data sets, even if the actual number of conflicts has not increased or has even fallen, and will affect all data sets. Since we cannot fully separate the trend we observe in violence and this measurement error, we will need to be somewhat cautious when basing inferences off of observed trends.

Figure A.31. Intrastate Wars, Across Data Sets, Low Intensity, 1946-2015

SOURCE: Sarkees and Wayman, 2010; Marshall, 2016; Uppsala Conflict Data Project, 2016. NOTE: COW data goes only through 2007.

### Ethnic and Civil Conflicts

Turning to a comparison of the databases and their treatment of ethnic and civil violence, the different data sets once again show largely similar trends. The databases considered in this section include the MEPV and PITF, the two that explicitly disaggregate intrastate violence into ethnic and politically driven conflicts (called civil violence in the MEPV data and revolutionary violence in the PITF data). Figure A.32 shows trends in low-intensity ethnic violence. The MEPV data report a more significant level of low-intensity ethnic conflicts than do the PITF data. The peak in low-intensity ethnic conflict appears to be in the mid-1990s (this is clear in the MEPV line), and the level of conflict falls after this point until about 2000, when it begins to increase. Both data sets confirm the observation that low-intensity ethnic violence has fallen

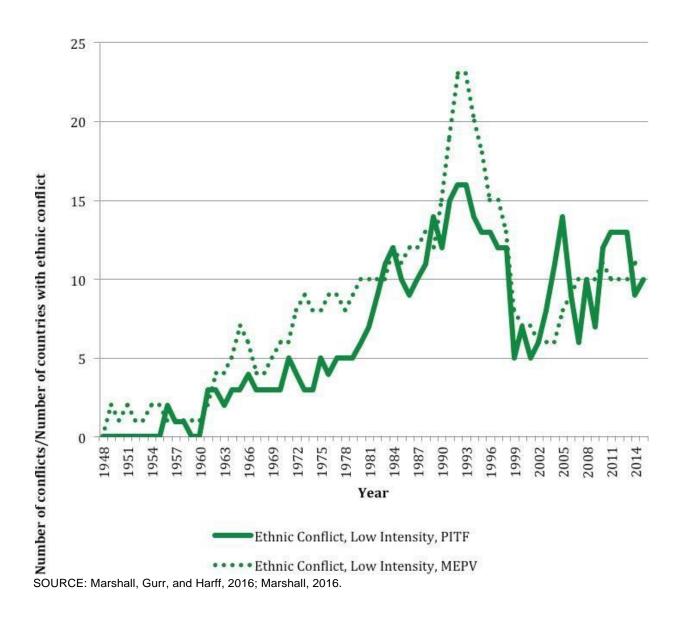
since its peak but has increased substantially since about 2000 and does not appear to be decreasing or following the downward trend observed for most other forms of violence.<sup>13</sup>

The two databases report similar levels and trends in medium- and high-intensity ethnic conflict (Figure A.33), although the PITF data do not allow us to disaggregate the violence into two separate intensity categories. In general, ethnic violence at these higher levels peaks in the late 1970s and 1980s before falling at the end of the Cold War, until about 2000. After this point, medium-intensity ethnic violence has been increasing, though at a slower rate than low-intensity ethnic violence. As noted previously, much of the increase observed in recent years in intrastate conflict has been in low- and medium-intensity ethnic conflict. The graphs below confirm that observation.

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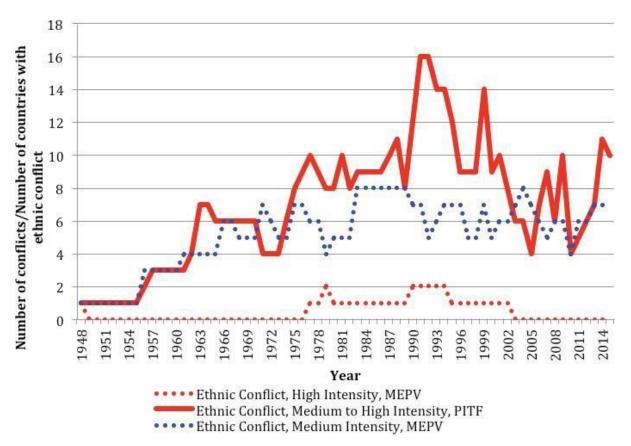
<sup>&</sup>lt;sup>13</sup> Again, the possible measurement error may have some bearing on this result.

Figure A.32. Ethnic Wars, Across Data Sets, Low Intensity, 1948–2015



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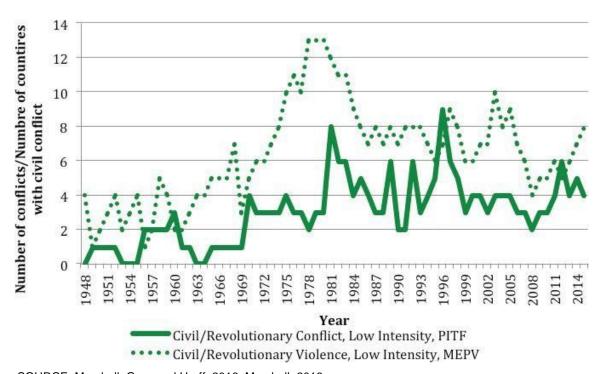
Figure A.33. Ethnic Wars, Across Data Sets, Medium and High Intensity, 1948 –2015



SOURCE: Marshall, Gurr, and Harff, 2016; Marshall, 2016.

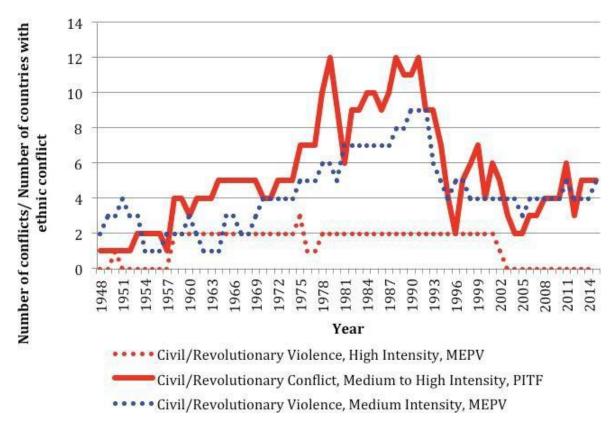
Trends in civil or revolutionary war violence across the MEPV and PITF data similarly show some differences, but overall similar trends (Figures A.34 and A.35). The low-intensity trend lines peak at slightly different points, around 1980 for the MEPV data and around 1995 for the PITF data. The MEPV data show another increase and small peak in 2003. Both also show an increase in civil/revolutionary conflict after 2007 through to the present. The graph suggests that some of the increase in intrastate violence has also been driven by an increase in low-intensity civil conflict in recent years. The MEPV and PITF data also report similar amounts of medium-and high-intensity civil or revolutionary violence with a peak in the late 1970s and another in the early 1990s. There was a reasonably sharp decline afterward, with a very slight uptick since about 2012. The decline of civil and revolutionary conflict appears somewhat stronger than that in ethnic conflict, but still slower and more tenuous than the decline in interstate violence, particularly at lower intensities.

Figure A.34. Civil/Revolutionary Wars, Across Data Sets, Low Intensity, 1948 -2015



SOURCE: Marshall, Gurr, and Harff, 2016; Marshall, 2016.

Figure A.35. Civil/Revolutionary Wars, Across Data Sets, Medium and High Intensity, 1948 -2015



SOURCE: Marshall, Gurr, and Harff, 2016; Marshall, 2016.

### UCDP and COW, Nonstate Conflict

Several of the data sets used to track trends in violence thus far include only conflicts that involve at least one state actor. The PITF and MEPV data sets are exceptions, as they also include violence involving only nonstate groups. However, there are also data sets that focus explicitly on tracking this latter type of violence—that is, violence between two nonstate entities, including events within a single state and events that cross state lines. The UCDP and COW data sets, for example, also record nonstate conflict. The COW nonstate conflict data use the same battle-death thresholds that apply for interstate and intrastate violence, but slightly lowers the threshold required for conflict participation to 25 battle deaths per participant. In the COW data set, there are three types of conflict that involve nonstate groups: conflicts between nonstate entities fighting in a nonstate territory, nonstate wars that take place across borders, and intercommunal conflicts (which the COW data set counts as intrastate wars, but for the purpose of this discussion, we count them as nonstate conflicts). <sup>14</sup> Figure A.36 shows ongoing nonstate

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 $<sup>^{14}</sup>$  For COW data in this section, see Sarkees and Wayman, 2010; and Sarkees, 2010.

conflicts in the COW data set. All are medium intensity. There are no high-intensity nonstate conflicts. The graph also shows that unlike other forms of conflict, nonstate conflict appears to have become increasingly frequent since 1990, rising immediately after 2000 and remaining relatively high even in 2007, the final observation in the data set. This is consistent with the observation that nonstate conflict might be increasing in frequency, even as major interstate and some forms of intrastate violence become less likely. As a caveat, nonstate conflict is another case where measurement error caused by improved reporting might contribute to the observed increase in violence. This measurement error is cause for caution, but does not negate apparent trends toward increased nonstate conflict.

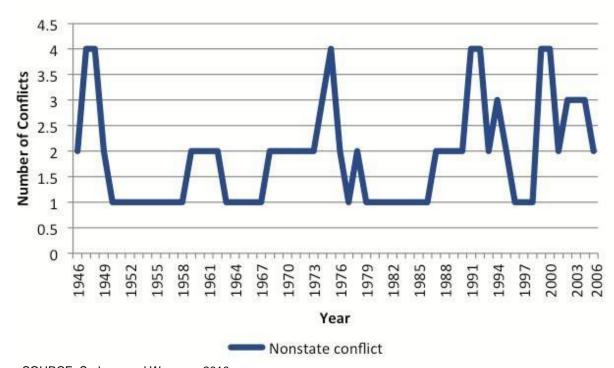


Figure A.36. Nonstate Conflict, Medium Intensity, COW, 1946–2007

SOURCE: Sarkees and Wayman, 2010.

NOTE: Includes COW nonstate conflict data set and intercommunal wars from the intrastate data set.

The UCDP nonstate conflict data set covers nonstate conflict only between 1989 and 2015. It includes "communal and armed conflict between two organized groups, neither of which is the government of a state, which results in at least 25 battle deaths in a year." Figures A.37 and A.38 show trends in nonstate conflict for medium to high and low intensities. Compared with the COW data set, the UCDP data set codes slightly fewer medium-to-high-intensity conflicts over the 1989–2015 period. This seems to reflect definitional and coding differences between the two data sets. The UCDP data also capture a large amount of low-intensity nonstate

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 $<sup>^{15}</sup>$  Sundberg, Eck, and Kreutz, 2012, pp. 351–362; Uppsala Conflict Data Project, 2012.

conflict that is not coded by the COW data. The level of low-intensity nonstate conflict has varied significantly, reaching peaks in the early and late 1990s, before falling consistently between 1999 and 2007. However, recent years (post 2009) reveal another increase in this type of violence. Throughout the period under consideration, low-intensity nonstate conflict is much more common than nonstate conflict at higher intensities. Significantly, neither high- nor low-intensity nonstate conflict appears to be decreasing, suggesting possible persistence in conflict at the nonstate or societal level even as conflicts involving state actors begin to decline. Importantly, because of its reduced time frame, this trend line is unlikely to be affected by measurement error in the same way other data on low-intensity conflict might be. As a result, the apparent persistence of nonstate conflict in recent years observed here is particularly important and adds confidence to our assessment of trends in this type of violence.

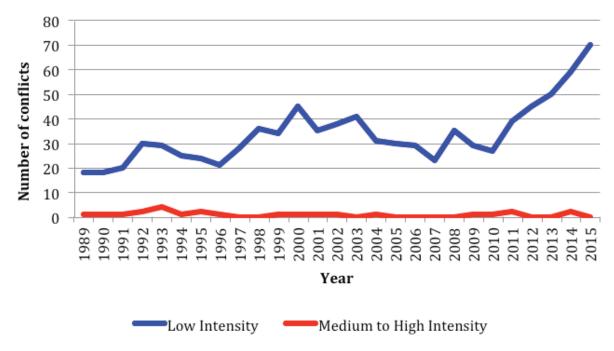


Figure A.37. Nonstate Conflict, UCDP, 1989-2015

SOURCE: Uppsala Conflict Data Project, 2016.

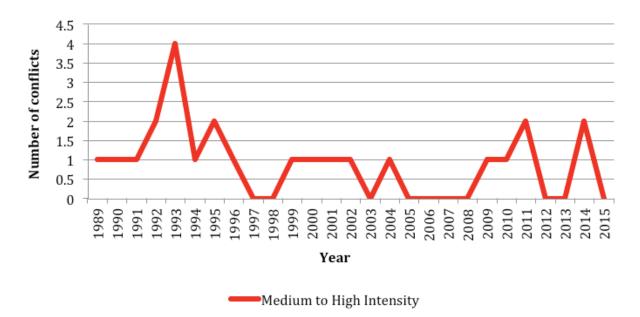


Figure A.38. Nonstate Conflict, Medium to High Intensity, UCDP, 1989-2015

SOURCE: Uppsala Conflict Data Project, 2016.

# Summary

At the aggregate level, all databases considered in this section show a decline in interstate and intrastate conflicts since the 1980s and early 1990s, when these forms of violence were at their peak. Armed conflict has not been eliminated, but what remains, including a recent uptick, is mostly low- and medium-intensity intrastate violence, both ethnic and civil. In addition, concerns about measurement aside, violence between nonstate groups does not seem to be following the same downward trend as that involving at least one state actor.

Based purely on the timing of trends and observed shifts in violence, the end of the Cold War and the breakup of the Soviet Union appear to be significant events that contributed to a decline in the frequency and intensity of interstate and intrastate violence, as a number of different types of conflict and most data sets suggest falling rates and intensities of conflict after this point. There are many reasons why the end of the Cold War may have affected conflict trends. The end of the United States-Soviet Union rivalry may have reduced tension in the international system and the likelihood of proxy wars. U.S. military preeminence after 1991 may have deterred certain types of aggressive behavior by smaller states or provided security and guarantees that limited conflict escalation, preventing both interstate and intrastate conflicts. Additionally, the spread of international norms and democratic principles may have supported pacific dispute resolution between and within states. Finally, economic interdependence may have created meaningful ties between states and prosperity within states, either of which could reduce the potential for conflict in the future.

Several conflict trends also identify break points around 2001 or 2012, with some forms of violence experiencing an upward trend after those dates. It may be changes in the international system after the September 11 terrorist attacks, an increasingly interventionist United States, the effects of U.S. wars in Iraq and Afghanistan and international involvement elsewhere, economic downturn after 2008, or the Arab Spring and its aftermath that can explain an apparent renewal of certain types and intensities of violence.

The significant decline in conflict at the aggregate level, therefore, masks more-nuanced trends in certain types and intensities of conflict. Importantly, despite clear differences across data sets in how conflict is counted and coded, these same general trends emerge from each of the data sets that we have reviewed thus far. These trends suggest that conflict has taken different forms and intensities and involves different actors, but has not been eliminated. Most significantly, lower- and medium-intensity intrastate conflict and violence involving only nonstate actors continue to occur and do not follow the same strong downward trend observed for other forms of conflict. The next section will explore this observation further, focusing on other forms of intrastate political violence carried out by nonstate and societal actors.

# Trends in Societal Violence

A review of armed conflict and war suggested that while wars between states become less common, lower-intensity violence often involving nonstate actors within a single state remains more significant and is even increasing in some cases. This section focuses more specifically on organized and spontaneous societal violence at lower intensities and involving primarily nonstate actors. Table A.7 highlights the portions of the typology that will be covered and provides some examples of the types of violence that fall into each category (these are illustrative and not comprehensive). It is worth noting that some types of violence easily fit into more than one category and that some forms of societal violence may involve a state actor in some capacity. As noted in the introduction, boundaries between cells in the typology are best considered as porous.

Table A.7. Organized and Spontaneous Societal Violence

	Interstate	Intrastate				
		One-Sided State	State v. Nonstate	Organized Societal	Spontaneous Societal	
High Intensity: Battle deaths of 100,000 per year or 500,000 total						
Medium Intensity: Battle deaths of 1,000 per year or 100,000 total			Revolutions, guerilla war	Terrorism, riots, revolutions, guerilla war	Terrorism, riots, revolutions	
Low Intensity: Battle deaths of 25 per year or 1,000 total			Revolutions, guerilla war	Terrorism, riots, revolutions, assassinations	Terrorism, riots, revolutions, assassinations	
Minimum Violence: Battle deaths of 0–25 per year; nonviolent conflict/dispute				Strikes, demonstrations	Strikes, demonstrations	

#### Global Terrorism Database

The GTD covers domestic and transnational terrorism since 1970. It defines *terrorism* as an "intentional act of violence or threat of violence by a non-state actor." It also requires that the incident meet two of the following three criteria:

(1) The violent act was aimed at attaining a political, economic, religious, or social goal; (2) The violent act included evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) other than the immediate victims; and (3) The violent act was outside the precepts of International Humanitarian Law.

This final requirement essentially means that the violence will target civilians rather than combatants. <sup>16</sup>

Attacks are coded by the number of fatalities, their location, target, tactic, and where possible, the perpetrating group. The majority of terror attacks actually cause no deaths. Although this may seem counterintuitive, terrorists often use violence to call attention to themselves or their cause, and would rather have lots of people watching the attack than lots of people killed in it. It also reflects the fact that many less-sophisticated terror attacks are less effective in execution than in planning because of human error or police intervention. Those that do cause deaths typically remain in the low-intensity category, simply because few terror attacks cause the 1,000 deaths needed to make it to the "medium" intensity level of violence.

Figure A.39 identifies the four attacks since 1970 that have had more than 1,000 deaths. These include a 1994 attack on Rwandan Tutsi refugees by Hutus; the 9/11 attacks in New York City; and a 2014 ISIS-claimed abduction of more than 1,500 Iraqi soldiers, the majority of whom were later killed. Figure A.40 shows that low-intensity terror attacks increased sharply in the late

<sup>&</sup>lt;sup>16</sup> START, 2012.

1970s before falling in the mid-1980s and rising again in the 1990s. The number of low-intensity attacks also has increased since 2001, declining slightly between 2009 and 2012 before rising exponentially in 2013 and 2014 and falling slightly in 2015. Minimum-violence attacks have also risen dramatically since 2007, after declining since the early 1990s as shown in Figure A.41.

The increases in the trend lines for low-intensity and minimum-violence terrorist attacks are driven by a number of factors, many of which suggest limitations of the GTD data set more generally. First, there has been a real increase in these types of attacks in places like Iraq, Syria, and Somalia. Second, the criteria that the GTD has used to identify terrorist incidents have also changed over time, and now include certain types of attacks that formerly were excluded. More recently, the GTD has included attacks by militant groups on soliders even in the context of a larger war. In most data sets, these would not be counted as terrorism. In fact, the 2014 ISIS attack on 1,500 Iraqi soldiers is one such incident. ISIS and Iraq are at war; thus, this attack is ostensibly part of this conflict and not terrorism per se. Finally, the sources included in GTD's analysis also change over time. As the project has progressed, researchers have gained access to new data sources that have provided better data and allowed identification of a greater number of attacks. At the same time, media attention to terrorist attacks has increased following the 9/11 attacks. However, while some of the observed increase may be due to reporting and definition issues, it still does seem to be the case that low-intensity and minimum-violence terror attacks appear to have become more common, even as other types of conflict have become more infrequent. Trends in terror attacks that do not cause fatalities or that cause very few fatalities remain relevant because even if they cause no death, they can still contribute to instability, retaliation, future conflict, and escalation of ongoing conflicts. In addition, the sheer number of these attacks and the uncertainty that they cause for military and political actors reinforce their continued relevance.

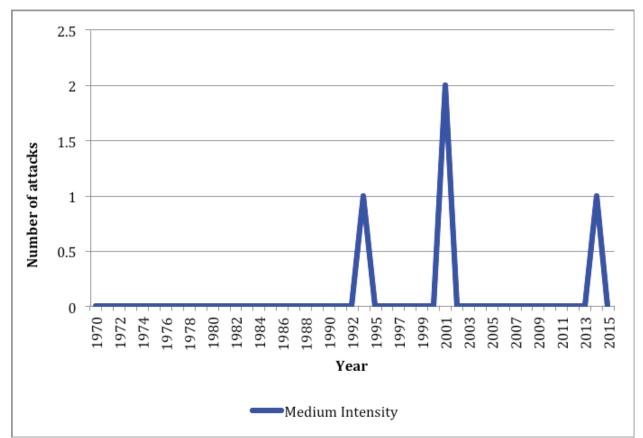
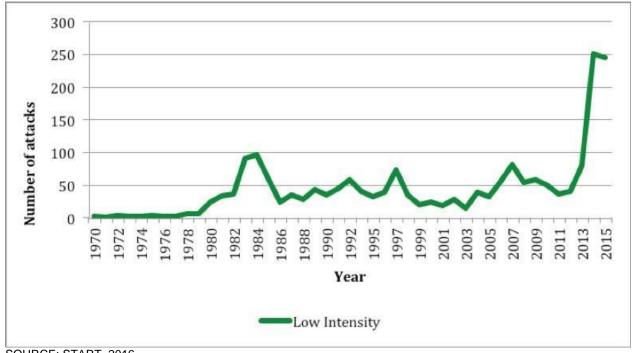


Figure A.39. Terror Attacks, Medium Intensity, GTD, 1970–2015

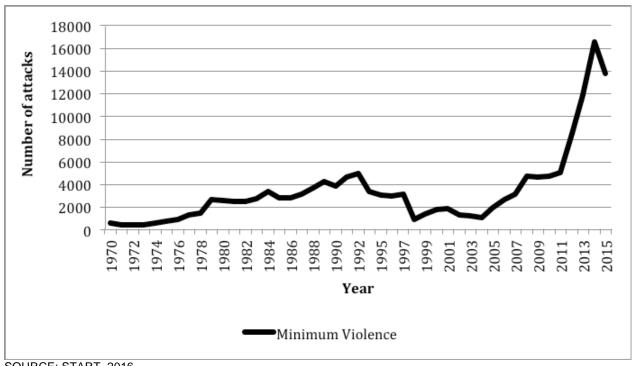
SOURCE: START, 2016.

Figure A.40. Terror Attacks, Low Intensity, GTD, 1970-2015



SOURCE: START, 2016.

Figure A.41. Terror Attacks, Minimum Violence, GTD, 1970-2015



SOURCE: START, 2016.

#### Cross National Time Series Databank

Violence by nonstate actors may also come in forms other than terrorism. The CNTS Databank includes information on a number of different types of societal violence, including assassinations, protests, riots, demonstrations, strikes, and purges over the period 1919–2015. The data have some limitations, including the fact that they do not include information on fatalities (so cannot be precisely disaggregated by intensity) and do not separate organized societal violence from spontaneous violence. This is an important distinction when considering overall trends and an unfortunate shortcoming of the CNTS data. In some cases, it is possible to infer the intensity or spontaneity of an event from the definition or type of violence, but this may not be true in all cases. For example, most assassinations have relatively low death counts and are planned. Peaceful demonstrations would also be minimum violence, but may be organized or spontaneous. Riots are most likely to be low intensity and are often spontaneous, but purges may involve death rates at medium intensity or even higher. The definitions for each type of violence captured by the CNTS data are included in Table A.8. Also included are notes on whether this violence is likely to be spontaneous or organized and possible level of intensity. In reviewing the figures that follow, it is important to keep in mind that the quality of the CNTS data is also affected by reporting and media coverage. Events such as protests and demonstrations may not always be covered by local or national media, especially in developing countries and especially in the early decades of our analysis. This may result in artificially large increases in the amount of violence in recent years. As for previous analyses, improved reporting may lead to an apparent increase in number of these types of incidents over time, even if the true global incidence is the same.

Table A.8. Cross National Time Series Data Definitions

Type of Violence	Definition	Typology Categories
Assassination	Any politically motivated murder or attempted murder of a high government official or politician	Organized; minimum violence to low intensity
Riots	Any violent demonstration or clash of more than 100 citizens involving the use of physical force	Spontaneous; minimum violence to medium intensity
Antigovernment demonstrations	Any peaceful public gathering of at least 100 people for the primary purpose of displaying or voicing their opposition to government policies or authority, excluding demonstrations of a distinctly anti-foreign nature	Organized or spontaneous; minimum violence
Guerilla warfare	Any armed activity, sabotage, or bombings carried out by independent bands of citizens or irregular forces and aimed at the overthrow of the present regime	Organized or spontaneous; low to medium intensity. May become state v. nonstate conflict at certain level
Revolution	Any illegal or forced change in the top government elite, any attempt at such a change, or any successful or unsuccessful armed rebellion whose aim is independence from the central government	Organized or spontaneous; low to medium intensity. NOTE: May also fall into state v. nonstate group if protracted
General strikes Ar	ny strike of 1,000 or more industrial or service workers that involves more than one employer and that is aimed at national government policies or authority	Organized or spontaneous; minimum violence to low intensity
Purges	Any systematic elimination by jailing or execution of political opposition within the ranks of the regime or the opposition	Organized, but likely executed by the state as one-sided violence; low to high intensity
Government crises	Any rapidly developing situation that threatens to bring the downfall of the present regime—excluding situations of revolt aimed at such overthrow	Organized or spontaneous; minimum violence to medium intensity

Assassinations are likely to be planned events and to have a small number of fatalities, thus, they generally fall into the minimum violence or low-intensity categories according to our typology. Figure A.42 shows that assassinations became increasingly frequent after 1970, reaching peaks in the late 1970s and early 1990s, before declining. The number of assassinations increased between 2000 and 2005, but fell between 2005 and 2009 before rising again. Some of the peaks can be explained in the context of ongoing events, including long-simmering terror campaigns, political instability, or insurgencies. For instance, the peaks in assassinations in the 1970s and 1980s were driven by violence in such countries as Guatemala, Argentina, El Salvador, Turkey, and Spain. Assassination violence in the late 1980s and early 1990s reflects surges in this type of violence in countries such as El Salvador, Guatemala, Colombia, Chile, and Peru, as well as Turkey and Algeria. The smaller peak in 2004 is driven almost entirely by violence in Colombia. The recent increase in the number of assassinations has been relatively significant, and reflects a further diffusion of this type of violence to Afghanistan, Somalia, and places in Southeast Asia as well as a gradual increase in the frequency of assassinations in countries such as Mexico and others in Central America and Sub-Saharan Africa. Returning to the discussion in the first section of this appendix, the frequency and location of assassinations

offer some insight into the crime-, gang-, and drug-related violence that remains highly pervasive and damaging but difficult to measure. Although this criminal violence is not the same as political assassinations, the two may be correlated. Locations and time periods with high criminal violence may also have high rates of assassination, sometimes executed by similar groups of people.

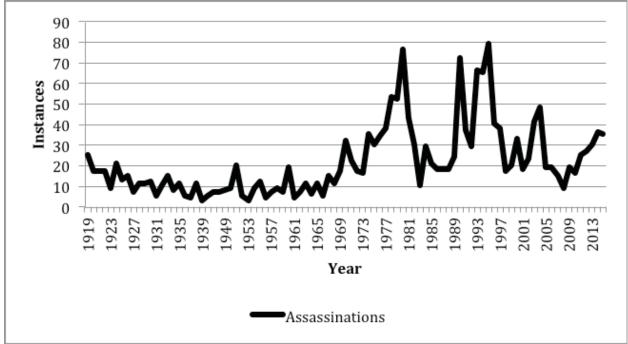


Figure A.42. Assassinations, CNTS, 1919–2015

SOURCE: CNTS Data Archive, 2016.

Violent riots (Figure A.43) that involve at least 100 people have occurred at a steady rate since about 1949, with several sharp spikes (early and late 1960s, around 1990, and 2011), a period of slightly increased activity in the 1980s, and a slight decrease in the 1990s and 2000s leading up to 2010. The peak in the 1960s primarily represents violent riots within the United States. The increase in the 1980s is attributable largely to intercommunal riots in India. Finally, the most recent increase in 2010–2014 was driven primarily by the Arab Spring and subsequent political movements and instability in the Middle East. Instability in Southeast Asia and Sub-Saharan Africa also contributed to the recent spike in violent protests. This trend underscores the continued relevance and surge potential for riots, even as other forms of conflict decline and disappear. The timing and size of the spike also reinforces the possible effect of media focus and reporting on observed trends. Some of the increase observed during this period might reflect increased attention to demonstrations and protests in countries affected by the Arab Spring, which led to more complete reporting. It is worth noting that the number of riots has declined in 2015 by a sizable amount.

It is also notable that violent riots are typically driven by specific trigger events and are often temporally localized, meaning that they seem to have relatively short durations. In some cases, they have also been the first step toward a larger-scale conflict, intrastate war, or other form of societal violence or nonviolent protest activity. This last point emphasizes the fluidity of different types and intensities of societal violence despite the fact that we disaggregate this violence into specific types of conflict in our typology.

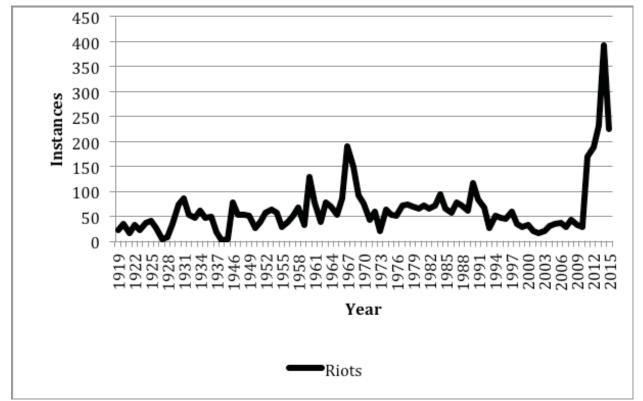


Figure A.43. Riots, CNTS, 1919-2015

Trends in nonviolent antigovernment demonstrations (Figures A.44) show a somewhat less volatile trend, with a gradual increase from the early 1970s through about 1993 and then a gradual decrease until 2010, when the Arab Spring leads to sharp increase in the total number of demonstrations in 2011 and 2012. The number of demonstrations fell in 2013 and 2014 but rose dramatically in 2015. The slow increase in the 1970s and 1980s may reflect growing unrest in countries within the Soviet Union (and its satellites, such as Poland), as well as events in Southeast Asia in countries such as South Korea and the Philippines. More-recent surges in the number of protests are driven primarily by unrest in the Middle East but also by protests in Sub-Saharan Africa and South and Southeast Asia. These events would be classified as minimum violence according to our typology because they are, by definition, nonviolent, but could be either sporadic or organized.

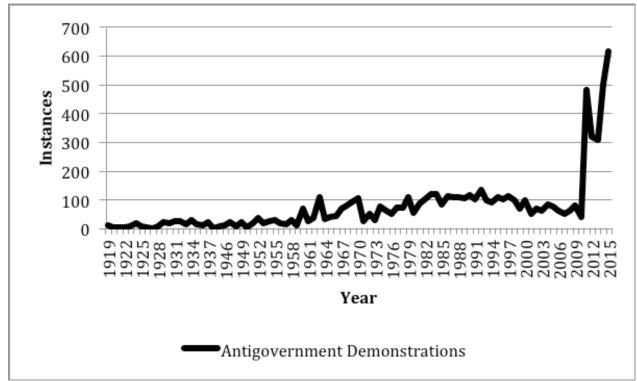


Figure A.44. Antigovernment Demonstrations, CNTS, 1919-2015

Guerilla warfare (Figures A.45 and A.46) is typically organized and likely categorized as low-intensity violence according to our typology. Figure A.49 shows the full trend in guerilla war while Figure A.50 provides a snapshot of the same trend line at points well below its sharp 1970 peak. It is worth noting that guerilla warfare may involve conflict between two nonstate groups or a nonstate group and a state, even qualifying as "armed conflict" at sufficiently high levels. The rate of guerilla warfare has been relatively stable, except for a sharp peak around 1970, driven almost entirely by the Vietnam War and events in South Asia (and possible measurement error) in places such as Cambodia and Laos. Aside from this spike, there is some evidence of a slight increase from about 1940 to 1969, then a slight decrease from about 1989 to 2009. There is also a clear upward trend after 2010 with only a small decrease in 2015. This increase is driven by both a diffusion of this type of violence to new countries and an increase in the frequency of attacks. Countries driving this increase include Afghanistan, Egypt, Nigeria, Morocco, Colombia, Somalia, Sudan, Turkey, and Syria. Guerilla warfare does seem to be one of the few forms of violence that is enduring and increasing while other types of conflict begin to disappear, although, as noted previously, this violence tends to be at lower levels of intensity than other forms of interstate and intrastate violence. That said, guerilla warfare observed in Syria and Afghanistan has achieved somewhat higher levels of intensity.

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Figure A.45. Guerilla Warfare, CNTS, 1919-2015

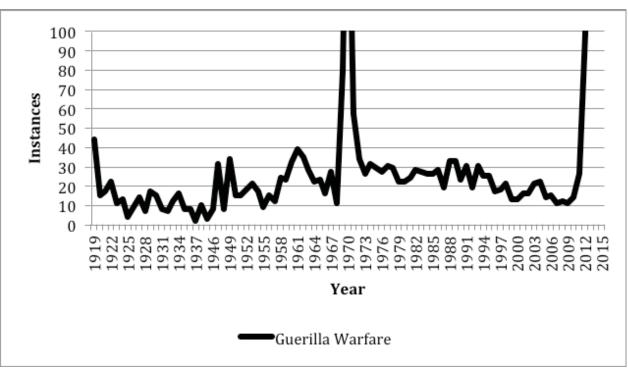


Figure A.46. Guerilla Warfare, Snapshot, 1919-2015

SOURCE: CNTS Data Archive, 2016.

While trends in protests, riots, and assassinations do not reveal the clear downward trend observed in interstate and intrastate conflict, revolutions do appear to be declining—the one type of intrastate violence involving nonstate actors to do so. Revolutionary violence is usually organized but can be spontaneous if in reaction to a specific event or grievance. The level of violence involved in a revolution is likely to vary substantially from case to case.

Figure A.47 shows that the incidence of "revolutionary" violence has fallen since a peak in about 1995, following the end of the Cold War and the breakup of the Soviet Union and Yugoslavia. The graph shows that the incidence of revolutionary violence rose gradually over time, between 1940 and 1995. This increase was not linear and there are clear periods of high and low activity. Revolutions were more common in the early 1970s and early 1980s than at the midpoints of these two decades. The number of revolutions peaks in the 1993–1995 period, driven by incidents in former Soviet states (Georgia, Tajikistan) and Central and South America (Peru, Colombia, Guatemala), before declining relatively consistently until 2011.

Importantly, revolutionary incidents of the type counted in the CNTS data are typically executed by nonstate actors, but revolutions themselves often include a state actor and may escalate to armed conflict in some cases. Thinking back to some of the trends illustrated in the discussion of revolutionary war, the trend line in Figure A.51 is remarkably similar in shape (though its level is much higher because revolutionary violent events are coded as individual acts, rather than revolutionary conflicts more generally).

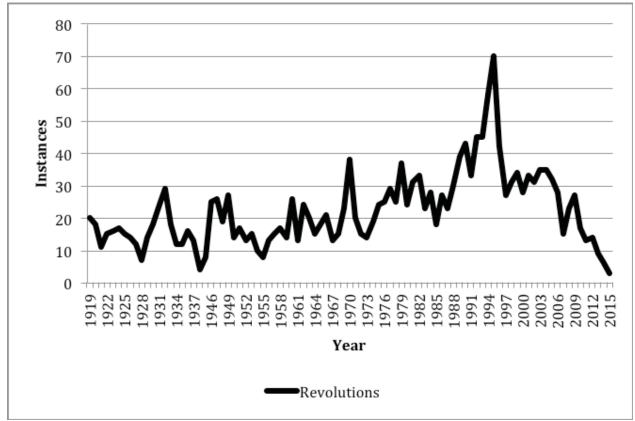


Figure A.47. Revolutions, CNTS, 1919-2015

General strikes are typically nonviolent and would likely fall into one of the low-intensity categories in our typology (either minimum violence or low intensity). However, strikes can also trigger more-violent demonstrations in many cases, and may be an early warning of additional violent conflict in the future. Strikes are also typically organized in advance, rather than occurring spontaneously. Their form, duration, and even the chances for violence during and after the strike may be affected by the power of organized labor and even the type of economic system—strikes may be less common in state-controlled economic systems than in free markets where workers are more able to organize and act collectively. Strikes also may take on very different meanings in different political and economic circumstances. Strikes in a democratic, free-market nation, for instance, may have less political significance than strikes in an authoritarian regime with a state-controlled economy. Figure A.48 shows a slow but steady increase in the number of strikes from the early 1970s through about 1990. After this point, strikes fell consistently until about 2005 before trending upward and rising more significantly in 2010 and 2015, with a one-time decline in 2014. As in other cases of societal violence, this upward trend reflects events driven by the Arab Spring as well as the diffusion of political and social unrest more generally across the Middle East, South and Southeast Asia, and even parts of Africa, underscoring the observation that societal violence may often overlap and bleed across

the distinctions set up in the typology. Also relevant to the increase in strikes in recent years may be the 2008 economic recession and its aftermath. While many economies have recovered since this increase, others have not, leading to continued strikes and additional violence. Strikes are likely to occur alongside government protests and riots, both violent and nonviolent, and to be part of organized social movements and even revolutions. Changes in the quality of reporting on strikes may also be relevant to the trends observed here, and may explain at least some of the upward trend observed in strike incidence.

The future of strikes as a meaningful form of political violence or unrest depends on whether the pre-2009 or post-2009 trend dominates in the future. If the pre-2009 trend dominates, we may expect to see a decline in the frequency of this type of conflict in the near future. If the post-2009 trend dominates, we may see an additional increase in the frequency of strikes. Here, economic trends may be especially important; strikes can be a sign of difficult economic times for businesses and workers.



Figure A.48. General Strikes, CNTS, 1919-2011

SOURCE: CNTS Data Archive, 2016.

Purges are also organized acts of political violence that may be societal or may involve a state acting against the opposition. In some cases, purges can also be considered another form of "one-sided state violence." In others, they may include violence within political parties, opposition movements, or other groups.

Purges range in the level and intensity of violence, from minimum to high intensity, but are most likely to be concentrated in the low- and medium-intensity categories. Unfortunately, the data do not allow us to distinguish between purges of different intensities. Figure A.49 shows that purges were most used in the early 1950s and again in the early 1970s, corresponding with events in China and the Soviet Union. Between 1980 and 2010, purges were almost completely nonexistent (possibly because of the spread of democratic norms against this type of state violence). However, since 2010, the number of recorded purges has increased substantially. This increase has not been driven by any one country but by an increase in purges in a number of countries, including Bahrain, Bangladesh, Russia, Tunisia, Burundi, Sudan, and Pakistan. This increase in purges may be limited in duration. However, it is also possible that events like the Arab Spring, the conflict in Syria, the rise of ISIS, and political unrest elsewhere in the Middle East and Asia will trigger regime change in other locations as well, possibly along with purges of regime loyalists and insiders.

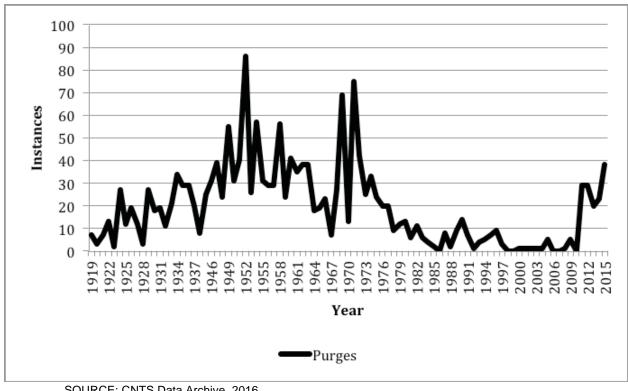


Figure A.49. Purges, CNTS, 1919-2015

SOURCE: CNTS Data Archive, 2016.

Government crises are events that may bring about the downfall of a regime and include incidents that are caused by organized and spontaneous political action as well as crises caused by other exogenous shocks, such as external threats or economic turmoil. Importantly, high homicide rates and the existence of powerful gangs or a vibrant drug trade are all events that could become government crises in certain contexts. As Figure A.50 shows, the number of government crises clearly peaks around 1970, driven by events in Central and South America (Colombia, Argentina, Bolivia, and Guatemala) and Europe (Spain, Italy). Other than this sharp spike, the number of crises per year fluctuates around a fairly constant level, declining somewhat in the early 1980s before rising again in the latter half of the 1980s. The number of government crises increased slightly between 2013 and 2014 and fell slightly in 2015. This trend appears to be in keeping with past historical trends and does not immediately suggest a long-term or dramatic increase.



Figure A.50. Government Crises, CNTS, 1919-2015

SOURCE: CNTS Data Archive, 2016.

#### Summary

Trends in violence perpetrated by nonstate actors, including both terrorism and other forms of societal violence, suggest a somewhat different pattern than trends identified for more-conventional types of warfare. Namely, while interstate and intrastate violence appear to be decreasing in frequency and severity, low-intensity violence by nonstate groups and societal actors is often increasing or staying constant. While this lower-level violence is often less damaging than major armed conflict, it still brings political instability and the potential for escalation into a major conflict, especially if it endures over long periods of time or spills across state borders. There is also an important association between the violence described in this section and our earlier discussion about the types of criminal violence that we cannot track effectively using existing data. Specifically, while the violent trends mapped here are not those of criminal violence, they are forms of political violence, which sometimes are associated with criminal violence and activity. As a result, the incidence of these types of events, over time and across countries, may be important indicators of where and when criminal violence is likely to be high or increasing. Most importantly, trends in this section suggest that conflict is not

disappearing, but rather changing its intensity and form. Violence such as purges, riots, antigovernment demonstrations, strikes, and assassinations all appear to have increased markedly since 2010 and to be on a more sustained upward trend that is distinctly different than trends in higher-intensity interstate and intrastate conflict. Finally, perhaps more than any other form of violence covered in this report, the low-intensity violence discussed here may be affected by measurement error caused by increasing reporting quality and media coverage of these events. Because this potential bias would increase the apparent frequency of low-intensity violence, it is possible that some of the apparent persistence of this form of violence may reflect changes in media coverage and not patterns in violence more generally.

# Trends in One-Sided Violence

The preceding section discussed trends in purges, one type of one-sided violence perpetrated by the state on an unarmed nonstate population or by a group's elites on opposition actors or even members of the group. This section considers two additional data sources that cover this type of conflict: genopoliticide data collected by the PITF and data on one-sided violence since 1989 collected as part of the UCDP. The trends show that, overall, this type of violence is not disappearing, but is becoming less frequent and less severe when it does happen. One explanation for this trend is the spread of international human rights norms. Another is the spread of democracy, which also tends to limit attacks by the state on nonstate groups and civilian populations. Table A.9 highlights the type of violence that will be discussed in this section. Note that the key characteristic of the violence in this section is that it is one-sided, regardless of whether the perpetrating actor is the state or a nonstate group.

Table A.9. One-Sided Violence

		Intrastate			
	Interstate	One-Sided State	State v. Nonstate	Organized Societal	Spontaneous Societal
High Intensity: Battle deaths of 100,000 per year or 500,000 total		Genopoliticide, ethnic cleansing, mass killing		Genopoliticide, ethnic cleansing, mass killing	
Medium Intensity: Battle deaths of 1,000 per year or 100,000 total		Genopoliticide, ethnic cleansing, mass killing		Genopoliticide, ethnic cleansing, mass killing	
Low Intensity: Battle deaths of 25 per year or 1,000 total		Genopoliticide, ethnic cleansing, mass killing		Genopoliticide, ethnic cleansing, mass killing	
Minimum Violence: Battle deaths of 0–25 per year; nonviolent conflict/dispute					

# Genopoliticide

The PITF codes incidents of genopoliticide over the period 1955–2015. Genopoliticides are defined as involving "promotion, execution, and/or implied consent of sustained policies by governing elites or their agents—or in the case of civil war, either of the contending authorities—that result in the deaths of a substantial portion of a communal group or politicized noncommunal group. In genocides, the victimized groups are defined primarily in terms of their communal (ethnolinguistic, religious) characteristics. In politicides, by contrast, groups are defined primarily in terms of their political opposition to the regime and dominant groups." Authorities are complicit in the killing associated with genopoliticide and the incident is likely to endure over a longer period of time.<sup>17</sup> This temporal criteria is what separates the PITF genopoliticide data from the data on purges described above.

The PITF data set ranks the intensity of the genopoliticide on a five-point scale (see Table A.10). We have translated these codes into our framework. However, it is important to note that these fatalities are not strictly "battle deaths;" they include the deaths of civilians targeted by the mass violence. As a result, we may see more genopoliticides at high-intensity levels than was observed for other forms of conflict.

Figure A.51 shows trends in genopoliticide since 1955. The majority of events occur between the mid-1960s and the mid-1990s and fall into the medium-intensity violence category. Medium-intensity genopoliticide rises consistently in frequency over the 1955 to 1975 period, reaching a peak between 1975 and 1980 before falling throughout much of the 1980s. There is another spike in the number of these violent episodes around 1990, after which point genopoliticide becomes increasingly infrequent. Low-intensity genopoliticide appears to have been most common in the mid- to late 1980s and early 1990s. More recently, there has been a slight increase in genopoliticide at low and medium intensities. Genopoliticide at the highest intensities has been infrequent over the entire period under consideration, with only a handful of incidents in each major decade, but none since about 2003. Figure A.51 confirms our observation that one-sided violence at levels approaching genopoliticide range is becoming less frequent, following the general trends observed for other forms of state-driven conflict.

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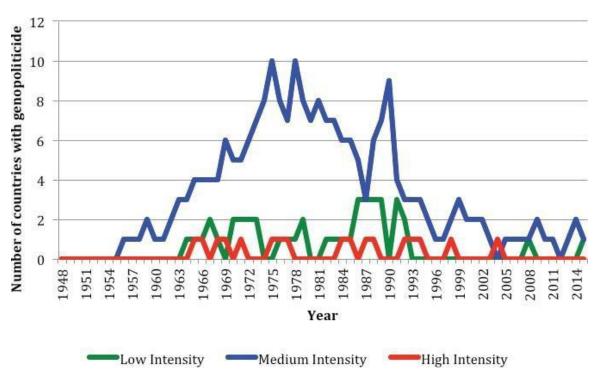
<sup>&</sup>lt;sup>17</sup> Marshall, Gurr, and Harff, 2012.

**Table A.10. PITF Conflict Intensity** 

Annual Fatalities	PITF Index	Conflict Typology Intensity
Less than 300	0	Low Intensity
300-1,000	0.5	Low Intensity
1,000-2,000	1	Medium Intensity
2,000-4,000	1.5	Medium Intensity
4,000-8,000	2	Medium Intensity
8,000-16,000	2.5	Medium Intensity
16,000-32,000	3	Medium Intensity
32,000-64,000	3.5	Medium Intensity
64,000-128,000	4.0	Medium Intensity
128,000–256,000	4.5	High Intensity
256,000+	5.0	High Intensity

SOURCE: Marshall, Gurr, and Harff, 2012.

Figure A.51. Genopoliticide, Low Intensity, PITF, 1948-2015



SOURCE: Marshall, Gurr, and Harff, 2012.

#### UCDP One-Sided Violence

The UCDP data set categorizes one-sided violence by the state and other formally organized armed groups on civilian populations with at least 25 deaths, but only for the 1989–2014 period. Extrajudicial killings in custody are excluded. The types of events included in the UCDP one-sided violence data set will be somewhat different than those included in the genopoliticide data set described above. Most significantly, it includes not only high-intensity episodes, but also lower-intensity episodes involving fewer deaths that may be similar to purges counted by the CNTS data.

Trends in one-sided violence according to the UCDP data set are shown in Figure A.52. There are several important observations. First, it is worth noting that there has been only one instance of high-intensity one-sided violence since 1989, along with a relatively small number of medium-intensity incidents. The medium-intensity state violence that did occur is concentrated in the 1990s and early 2000s with two instances of medium-intensity violence in 2013 and 2014. This is somewhat different than, but not entirely out of synch with, the trend suggested by the PITF data, which found most one-sided violence concentrated prior to 1995. Low-intensity one-sided violence coded by the UCDP is more frequent and likely falls below the thresholds set by the PITF data. According to Figure A.51, low-intensity one-sided conflict rises throughout the 1990s and reaches a peak between 2002 and 2004, but has become less prevalent since then. It is also relevant that there has been a slight increase in instances of low-intensity one-sided state violence since about 2009. This increase is consistent with the increase in other forms of low-intensity violence observed previously. However, the increase seems to be leveling off, so additional years of data will be needed to discern a long-term trend.

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<sup>&</sup>lt;sup>18</sup> Kristine Eck and Lisa Hultman, "Violence Against Civilians in War," *Journal of Peace Research*, Vol. 44, No. 2, 2007; Ralph Sundberg, "Revisiting One-Sided Violence—A Global and Regional Analysis," *Uppsala Conflict Data Program*, Paper No. 3, 2009.

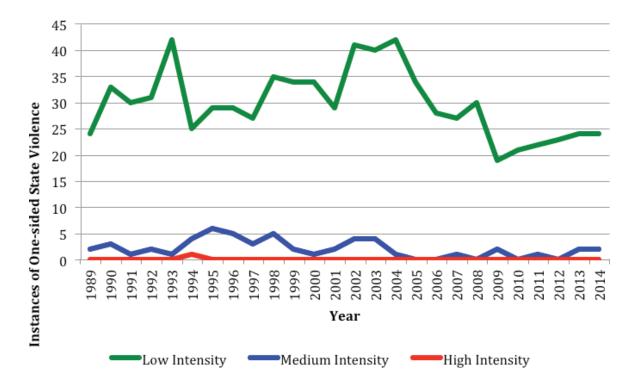


Figure A.52. One-Sided State Violence, UCDP, 1989-2014

SOURCE: Uppsala Conflict Data Project, 2015.

# Summary

Trends in one-sided state violence and genopoliticide suggest that these types of political violence are becoming less likely at all levels of intensity, particularly the high and medium intensity categories. Low-intensity one-sided violence is also becoming less frequent, but remains at reasonably high levels, even in 2011. Trends away from genopoliticide and one-sided violence may be encouraged by the spread of democracy or by a more interventionist international community. At the same time, any change in these global trends away from democracy or a weakening of international norms might affect the incidence of one-sided violence. It is also important that genopoliticides and mass killings, while less frequent, have not been eliminated and are costly in terms of human life when they occur (e.g., Darfur).

# Trends in Third-Party Interventions

The previous sections have considered many different types of conflict with many different players, from interstate to intrastate to nonstate. Another perspective on the use of military force, however, focuses less on the conflict or crisis itself than on interventions into that conflict or crisis by third parties. Trends in international interventions are relevant to a study of conflict trends for three reasons. First, the number and type of ongoing interventions can provide some

additional perspective on trends in instability and conflict at the global level. Second, trends in interventions may suggest systemic processes or characteristics that influence the timing, duration, and likelihood of various types of conflict. Finally, the number and scope of interventions may highlight mechanisms through which small-scale political violence spreads and escalates into major conflict.

Third parties may intervene in an ongoing conflict or crisis for several reasons. First, they may intervene to support one of the actors in an ongoing war. Second, they may intervene as a neutral third party to stop violence or to support peace. Third, they may intervene to offer relief or other support following a humanitarian or other disaster. One form of intervention is captured in the UCDP data as "internationalized intrastate violence"—that is, cases when third parties become involved in ongoing civil wars. However, this variable captures only a small number of the broader range of international military interventions that have occurred since World War II.

This section discusses trends in military interventions by the United States, as well as in the aggregate over time, considering not only numbers of interventions, but also types. Table A.11 highlights the cells within the typology on which this section will focus.

Table A.11. Interventions as a Type of Conflict

			Intrastate			
	Interstate	One-Sided State	State v. Nonstate	Organized Societal	Spontaneous Societal	
High Intensity: Battle deaths of 100,000 per year or 500,000 total	Military interventions		Military interventions			
Medium Intensity: Battle deaths of 1,000 per year or 100,000 total	Military interventions		Military interventions			
Low Intensity: Battle deaths of 25 per year or 1,000 total	Military interventions		Military interventions			
Minimum Violence: Battle deaths of 0–25 per year; nonviolent conflict/dispute	Military interventions		Military interventions			

### International Military Interventions

The International Military Intervention data set codes military interventions, defined as "the movement of regular troops or forces (airborne, seaborne, shelling, etc.,) of one country inside another, in the context of some political issue or dispute." The data set also provides a number of other relevant criteria. For example, "soldiers engaging in exercises in a foreign land, transporting

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<sup>&</sup>lt;sup>19</sup> Pearson and Baumann, 1993.

men or material to another destination are omitted as well. Military advisors are included only when they engage in direct combat." <sup>20</sup> The data set covers the period 1946 to 2005.

Although the data set does include information on fatalities, this information is missing too often to make it a useful metric in judging the intensity of the operation. Interventions are also coded by the types of activities that military personnel may be involved in, ranging from evacuations to combat roles. In most cases, combat interventions should involve more fatalities than interventions with other functions, such as "observe and negotiate" or "evacuation." The data set also includes interventions for "intimidation" purposes, when a country deploys its own military personnel to intimidate one of the sides in an ongoing conflict elsewhere. It is worth noting that the United States has used this type of intervention somewhat less often than other types, but has not completely abstained. Figures A.53 through A.58 illustrate trends in total interventions at the global level and specifically by the United States. In addition to considering total number of interventions, the figures disaggregate interventions by type, and they confirm that international military interventions are becoming more common, both overall and for the United States. This is especially true for noncombat interventions focused on negotiation, observing, transport, patrolling, and defending key sites, all activities common in peacekeeping and peacemaking operations.

The overall trend does seem to reveal a global increase in third-party interventions. At the global level, the number of third-party interventions increased dramatically in the 1960s, then remained largely the same until the end of the 1980s, when it dropped sharply before rising sharply in 1990, just as the Cold War was ending. The number of interventions fell somewhat after this point, but fluctuated throughout the latter half of the 1990s, then rose again after 2001. In part, this trend is driven by the increasing size of intervening coalitions, as each intervening country is coded as a new observation, even if several countries launch a joint mission. However, this does not completely explain the upward trend observed in Figure A.53.

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 $<sup>^{20} \</sup> Emizet \ F. \ Kisangani \ and \ Jeffrey \ Pickering, \ \textit{International Military Interventions 1989-2005}, \ Codebook, 2008a.$ 

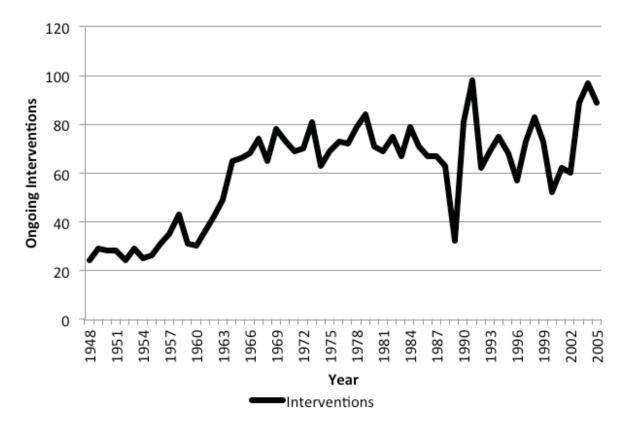


Figure A.53. Total Interventions, 1946-2005

Focusing on interventions by the United States, Figure A.54 suggests that military interventions rose to a peak in the mid-1960s before falling throughout the 1970s. Interventions were more likely in the 1980s but increased more significantly in the 1990s after the breakup of the Soviet Union. U.S. interventions reached a peak in 1998, before falling until 2001 and rising again fairly significantly immediately after. In 2005, the number of ongoing interventions had surpassed its 1990s peak and reached levels previously attained only in the 1960s. This increase likely reflects the U.S. response to the September 11 terror attacks and its more significant international presence as part of transnational counterterrorism efforts. Although the data do not tell us what has happened since 2005, the United States has begun to reduce this presence somewhat, as wars in Afghanistan and Iraq draw to a close. It remains to be seen how U.S. willingness to intervene may be affected by experiences in Afghanistan and Iraq, as well as by sequestration budget cuts.

Importantly, these trends in global and U.S. military interventions since 1990 occurred alongside the decrease in most forms of conflict, described in previous sections. Although the correspondence of these trends does not imply causality, it is possible that increased use of interventions has contributed to the reduction in conflict more broadly.

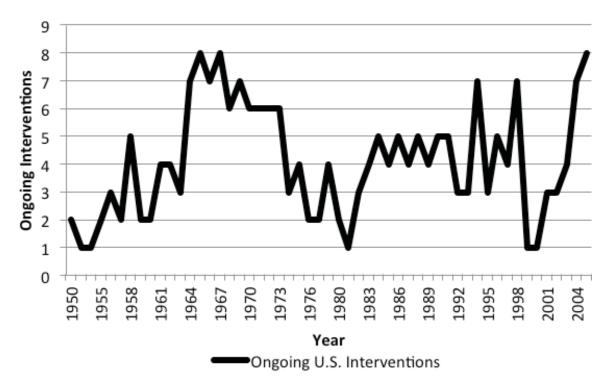


Figure A.54. Ongoing Interventions by the United States, 1950-2005

Figure A.55 shows the number of ongoing interventions at the global level disaggregated into three types: combat, noncombat, or intimidation. The peacekeeping category includes several different functions: patrolling, guarding, or defending key sites; transport; and negotiation or observation functions. The figure shows that combat intervention was the most common form of intervention for most of the period. Combat interventions were most likely in the 1960s and 1980s, declining after the Cold War. This is largely consistent with the higher levels of conflict observed in these earlier decades. The number of combat interventions rebounded in the early 1990s, however, and remained stable throughout the remainder of the observation period.

Noncombat interventions, however, followed a gradual upward trend, then increased dramatically after the end of the Cold War, surpassing the number of combat operations in the early 1990s. The number of noncombat interventions was sizable in the 1990s but decreased toward the end of that decade before increasing rapidly again after 2000. While some of this increase is attributable to the increase in the number of coalition parties involved in each intervention, the general observation that noncombat interventions have become increasingly frequent since 1990 and are now significantly more common than combat interventions is still important.

Finally, tallies of intimidation-related interventions have been consistently lower than either of the other two types. The number of intimidation interventions rose gradually throughout the 1960s before leveling off and remaining more or less constant over the remainder of the period.

International norms of state sovereignty and against intimidation may explain the lower incidence of this type of violence.

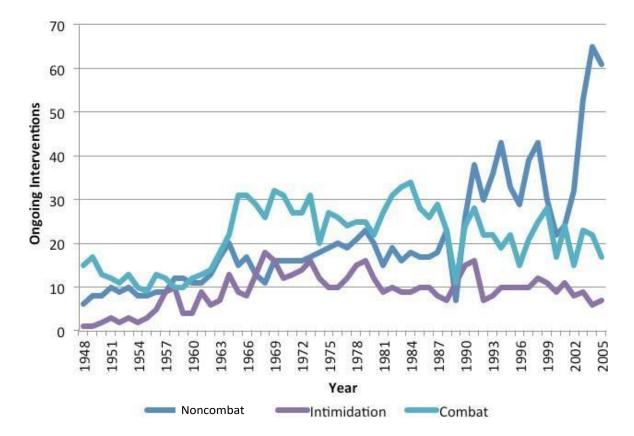


Figure A.55. Combat v. Noncombat Interventions, Global, 1946-2005

SOURCE: Kisangani and Pickering, 2008a.

NOTE: Noncombat includes evacuation, transport, negotiate/observe, patrol/guard/defend.

Figure A.56 investigates the composition of noncombat interventions in more detail. The recent increase in noncombat interventions, according to the graph, has been driven largely by increasing numbers of "transport," "negotiate or observe," and "patrol, guard, or defend" operations. "Transport" and "negotiate or observe" operations grew through the early 1990s before falling between 1995 and 2000. The frequency of these operations increased significantly after the September 11 terror attacks. The frequency of "patrol, guard, defend" operations began rising even more dramatically after 2000 and has now surpassed all other noncombat intervention types. This likely reflects the increased number of large multinational peacekeeping and stabilization/reconstruction missions that have occurred since 2001 in response to wars in Iraq and Afghanistan, natural disasters, and even civil violence in Sub-Saharan Africa.

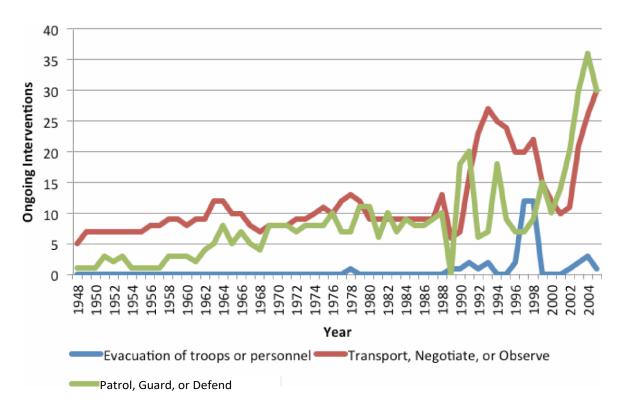


Figure A.56. Noncombat Interventions by Type (Disaggregated), Global, 1946 -2005

For the United States, combat interventions were most likely in the 1960s and 1980s (Figure A.57), and increasingly unlikely during the 1990s. Intimidation interventions have not been common but did occur in the 1990s: in Kuwait against Iraqi aggression; in Haiti to restore the democratically elected government; and in Sudan and Afghanistan against suspected terrorist facilities. These actions were indicative of the position of primacy the United States held at that time and its more extensive "global policeman" role. The most significant shifts in Figure A.57 are the sharp increase in the use of noncombat interventions after 1990 and two drops in combat interventions, first in the 1970s, and again in the early 1990s. The number of noncombat interventions peaked in 1998, falling until 2003 and then rising sharply. Figure A.57 offers additional insight into the increase in U.S. military interventions observed and suggests that this trend has been driven largely by an increased role in noncombat activities.

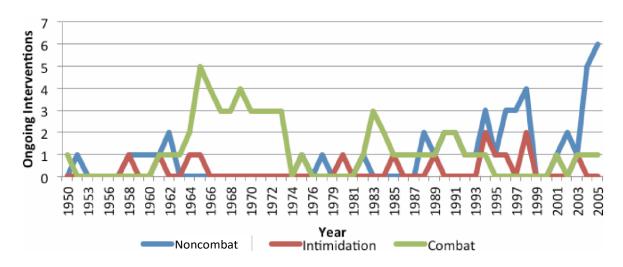


Figure A.57. Combat v. Noncombat Interventions, United States, 1946–2005

Figure A.58 breaks down noncombat activities further. "Patrol, guard, and defend" activities have been the most common, except for the 1990s period, during which evacuation and "transport, observe, or negotiate" operations increased significantly. After September 11, "patrol, guard, and defend" rose sharply, peaking in 2004 and then falling. "Transport, observe, or negotiate" rose only after 2003, but was continuing its upward trend at the end of the data series in 2005. As was true of global trends, this sharp increase reflects U.S. military operations associated with its global counterterror operations, as well as increasing involvement in humanitarian and relief efforts, intended both to improve the U.S. image overseas and to support counterterror activities indirectly.

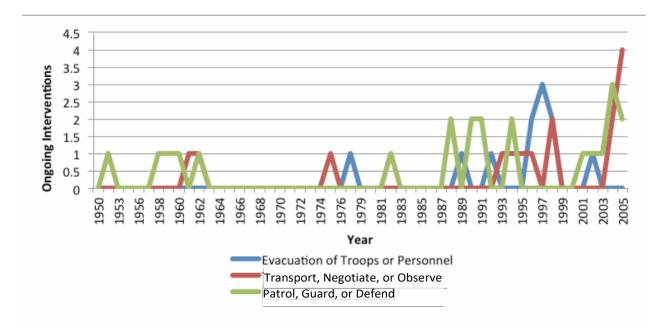


Figure A.58. Noncombat Interventions by Type (Disaggregated), United States, 1946 -2005

## Summary

While the incidence and intensity of conflict appears to be decreasing, the number of interventions by third parties appears to be increasing, driven largely by a growing number of noncombat interventions. These trends are similar for the United States and at the global level, and also provide evidence of an increasing reliance on large multinational coalitions to carry out military interventions, particularly those that do not involve conflict. The trend in interventions can be interpreted in positive or pessimistic frames. On the one hand, increasing interventions may explain some of the decrease in interstate and intrastate conflict, as the result of effective and successful peacekeeping operations. On the other hand, increasing interventions, and especially noncombat interventions, may reflect rising demand for these operations in the form of political instability and crises short of outright conflict at the global level. The data on low-intensity nonstate violence provided some evidence of this type of instability. The next section more carefully examines international crises and militarized disputes that fall short of outright armed conflict.

# Trends in Disputes and Crises

Not all uses of military force escalate to a true armed conflict or war. Instead, as alluded to previously, most conflict data sets define some threshold based on fatalities or some other metric that an incident or episode of violence must meet before it can qualify as a war or major episode of political violence. There are other data sets, however, that attempt to capture the crises and disputes that involve some sort of military activity but that fall short of standard definitions of

war and conflict. These data sets are useful supplements for a study of conflict trends because they capture a type of low-intensity violence that might otherwise be excluded. They are also useful for the perspective they provide on the types of disputes and crises that do escalate to major armed conflict and those that can be effectively de-escalated and controlled. This section considers two data sets focused on these types of crises and demonstrates that, just like interstate war, the incidence and intensity of intrastate conflict has also been declining. Table A.12 shows where these types of events would fit within our typology of conflict.

Table A.12. Disputes and Crises as a Type of Conflict

		Intrastate			
	Interstate	One-Sided State	State v. Nonstate	Organized Societal	Spontaneous Societal
High Intensity: Battle deaths of 100,000 per year or 500,000 total					
Medium Intensity: Battle deaths of 1,000 per year or 100,000 total					
Low Intensity: Battle deaths of 25 per year or 1,000 total	Interstate disputes and crises				
Minimum Violence: Battle deaths of 0–25 per year; nonviolent conflict/dispute	Interstate disputes and crises				

### Militarized Interstate Disputes

MIDs are defined as "united historical cases of conflict in which the threat, display or use of military force short of war by one member state is explicitly directed toward the government, official representatives, official forces, property, or territory of another state." Because the MID data set is part of the larger COW project, "short of war" means fewer than 1,000 battle-related fatalities. The MID data set categorizes these disputes according to their levels of violence or hostility, from no violence, to display of force, to use of force, to war (Table A.13). We used these levels of hostility to translate individual MIDs into our conflict typology. Because MIDs, by definition, fall short of the 1,000-death threshold, they may fall into our "minimum-violence" or "low-intensity" categories. Importantly, there may be MID incidents that correspond with "armed conflicts" in the UCDP or PITF data, because of the different ways each data set codes conflicts.

Figure A.59 shows MID onset from 1946 through 2010, the last date included in the MID data. It is important to note that while many of the figures in this report show cumulative numbers of conflicts, this particular one focuses on incident onset. It shows that low-intensity

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<sup>&</sup>lt;sup>21</sup> Palmer et al, 2015; Jones, Bremer, and Singer, 1996.

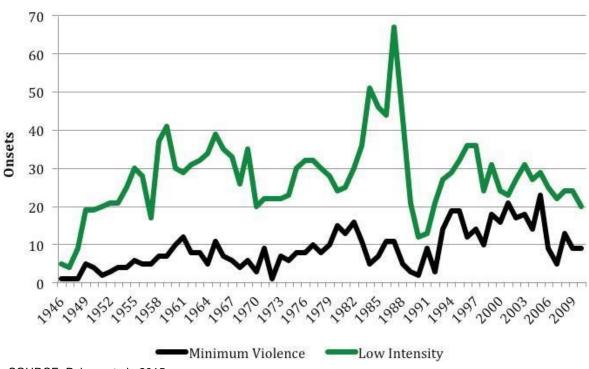
MIDs are less common than those involving little or no violence, and they occur at a reasonably constant rate during the period under consideration. Rather than being purely nonviolent episodes, MIDs may be a significant source of political violence and are often precursors to more-severe armed conflict. Also relevant is the fact that a large number of MIDs occur between "enduring rivals," countries that experience long-running and frequent conflict.

Both trend lines end in 2010, the last date of the MID data. While low-intensity MIDs seem to have peaked in the late 1980s, minimum-violence MIDs were highest more recently, in the early 2000s. However, since about 2003, both types of MIDs have fallen in frequency. It does not appear that the number of militarized crises has increased as a substitute for higher-intensity conflict. More recent data, however, would be required to confirm these initial observations.

Table A.13. MID Hostility Level and RAND Typology

Hostility Level	MID Category	RAND Typology Category
1	No militarized action	Minimum violence
2	Threat to use force	Minimum violence
3	Display of force	Minimum violence
4	Use of force	Low intensity
5	War	Low intensity

Figure A.59. Disputes (Onsets), by Level of Violence, MID, 1946-2001



SOURCE: Palmer et al., 2015.

#### International Crisis Behavior

The International Crisis Behavior data also record interstate disputes that fall short of war, from 1916 to 2013. The data are similar to the MID data in many ways, but have a slightly different focus and include a different type of event. For the purpose of the database, an international crisis is defined as an event that "satisfies two broad conditions: (1) change in type or increase of hostile verbal or physical interactions between two or more states that in turn (2) destabilizes their relationship and challenges the structure of the international system."<sup>22</sup> Crises have three major characteristics: "(1) there is a threat to one or more basic values (2) an awareness of finite time for response to the value threat (3) heightened probability of involvement in military hostilities." Each crisis is started by a trigger event that can include verbal, political, or economic acts, external changes, an internal threat (coup or strike), an indirect violent act, or a violent act. Each crisis included in the ICB data is also coded according to the severity and centrality of violence on a scale of 1 to 4. We use these four categories and the definitions included in the codebook to map crises in the ICB data to our conflict typology. The four levels of violence provided by the ICB data and how they map into our typology are provided in Table A.14.

Table A.14. Crisis Hostility Level and RAND Typology with Examples

Hostility Level	ICB Category	Example	RAND Typology Category
1	No Violence		Minimum Violence
2	Minor Clashes	Violence between troops of the Warsaw Pact and Czech forces in the Prague Spring Crisis of 1968	Low Intensity
3	Serious Clashes	Violence between India and Pakistan forces in 1965 Ran of Kutch Crisis	Low Intensity
4	Full Scale War	Japanese attack and Chinese counter-attack at the Marco Polo Bridge in early July 1937 (the initial moves in the long Sino-Japanese war [1937–45])	Medium Intensity

SOURCE: Michael Brecher and Jonathan Wilkenfeld, International Crisis Behavior Data set, Codebook, undated.

Figures A.60 through A.62 show crisis onsets over the period 1946 to 2013. Minimumviolence crises occur most frequently in the early 1960s and between 1976 and 1986. Minimumviolence crises are much less common after 1990, although they continue at about a rate of two new crises per year through 2013. Low-intensity crises were most likely between 1975 and 1995, with peaks in the mid-1970s and late 1980s. After 1991, low-intensity crises have also become less frequent, although they have continued to occur on a fairly consistent basis and at a rate

Behavior Data Codebook, Version 11, 2016. See, also, Brecher and Wilkenfeld, 1997.

<sup>&</sup>lt;sup>22</sup> Michael Brecher, Jonathan Wilkenfeld, Kyle Beardsley, Patrick James, and David Quinn, *International Crisis* 

higher than that of crises with no violence associated. While there have not been any of these low-intensity crises since 2011, the trend line suggests new crises are still likely. Medium-intensity crises have also become increasingly infrequent since 1991, with only a handful of incidents since 1994. These crises were most likely in the 1960s, 1970s, and early 1980s. Thus, although the numbers of onsets at various intensity levels and criteria for inclusion differ between the MID and ICB data, the same basic observations emerge: Lower- and minimum-intensity crises are most common, and although the incidence of these events has declined somewhat since the end of the Cold War, neither militarized disputes nor interstate crises have been eliminated, even as other forms of violence between states have fallen to zero.

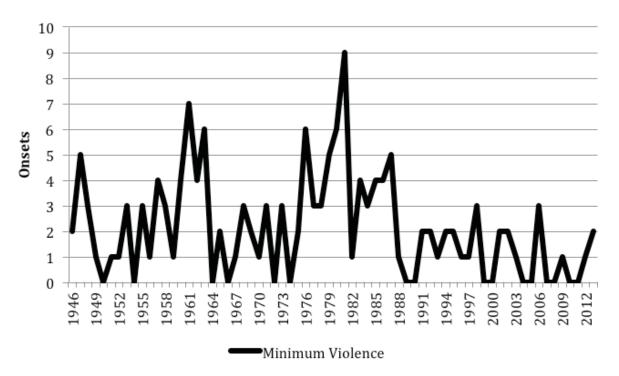


Figure A.60. Crisis Onsets, Minimum Violence, ICB, 1946–2013

SOURCE: Brecher, Wilkenfeld, et al., 2016.

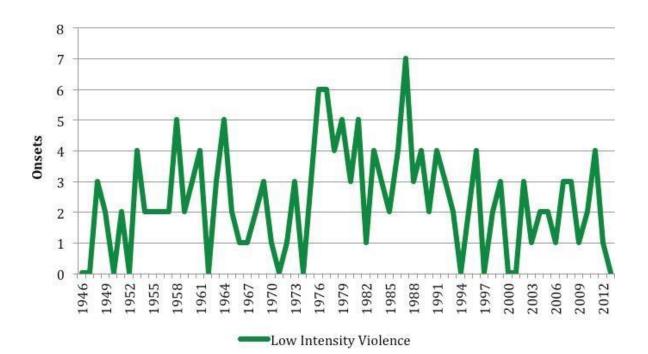


Figure A.61. Crisis Onsets, Low Violence, ICB, 1946–2013

SOURCE: Brecher, Wilkenfeld, et al., 2016.

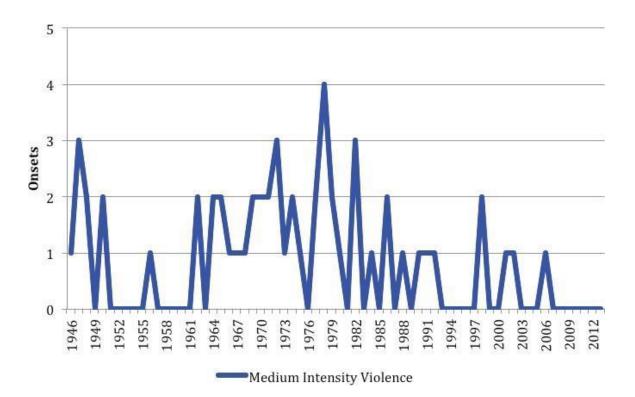


Figure A.62. Crisis Onsets, Medium Violence, ICB, 1946-2013

SOURCE: Brecher, Wilkenfeld, et al., 2016.

### Summary

Trends in interstate crises and disputes falling short of war suggest that these incidents also have become somewhat less frequent over recent decades than they were in the Cold War period, particularly at higher-intensity levels, but have not been eliminated. Changes in the international system, the spread of norms of pacific conflict resolution, and the spread of intergovernmental organizations and forums that support interstate communication before crises occur may all be responsible for the trends observed in this section. Importantly, as noted above, it does not seem that a reduction in the incidence of direct conflict has led to any sort of displacement effect toward militarized disputes. This might have been a worrisome trend, had it occurred, since an increasing number of disputes could suggest a high risk for new conflicts, following even minor shifts in the international system. Finally, there are several caveats worth noting. First, neither the MID nor the ICB data deal with intrastate disputes. These types of events are best captured in the CNTS data on protests, demonstrations, riots, and similar events. Second, both data sets terminate well before the present day. The ICB data cover only the period through 2007; the MID data, through 2001. This limits our ability to draw meaningful observations about the rates of interstate conflict in recent years and somewhat dates our assessment of this form of violence.

# Conclusion

This report has summarized trends in conflict across major data sets, conflict types, and intensities, focusing on the period between 1946 and the present. Some of the key observations include:

- Although each of our data sets uses its own definitions of conflict (or interventions or terrorism or disputes) and includes slightly different sets of events, the general trends revealed by each data set are largely the same, especially in recent years.
- At the global level and in aggregate terms, conflict is declining in frequency and intensity.
- This downward trend is clearest and strongest for interstate conflicts and high-intensity conflict. The downward trend in intrastate conflict has been somewhat slower and less decisive at low intensities.
- Interstate conflict reached a peak in the 1970s and 1980s and is infrequent at all levels of intensity after 1990.
- Intrastate conflict reached a peak in the late 1980s and early 1990s and has declined since 1991.
- More recently, since 2012, there has been an uptick in intrastate violence, particularly at low intensities and in intrastate conflicts that have become internationalized. However, it is worth noting that even with this increase, intrastate conflict remains below historic peaks and within historic average levels. It is far too soon to say for sure whether this uptick represents a temporary spike or the start of a longer-term trend.
- One-sided violence has become less frequent since 1990, but, again, has not been eliminated.
- There are some forms of conflict that are not following the overall downward trend.
- Demonstrations, riots, strikes, assassinations, and guerilla warfare all remain relevant forms of violence that show little evidence of declining or disappearing as suggested by spikes in these forms of violence in 2010 and 2011.
- Nonstate conflict, especially at low intensities, also is not following a downward trend, but instead appears increasingly frequent by some measures.
- The number of military interventions has increased since the end of the Cold War. This increase also reflects a change in the composition of military interventions, specifically a shift from combat to noncombat interventions.
- The incidence of militarized interstate disputes and international crises, especially those involving higher levels of violence, have also been less frequent since the end of the Cold War. Both types of events were more likely in the 1970s and 1980s. Crises and disputes have not declined as significantly as higher intensity conflicts, but neither have they risen significantly as rates of global conflict have fallen in recent decades.

The review has at least touched on all cells in the conflict typology, highlighting major trends, patterns that extend across data sets and conflict types, and observations that emerge from specific data sources and that apply most directly to particular conflict types. It is also possible to describe overall trends in conflict by considering how the distribution of conflict has moved across the typology matrix, as in Table A.15. Specifically, while medium- to high-intensity interstate violence used to be the predominant form of conflict, lower-intensity forms of violence involving nonstate actors and occurring at the societal level have become more common over time. We can imagine the concentration of conflict shifting from the upper left to lower right squares in the matrix. From this perspective, conflict has not been eliminated, but has rather changed in nature and intensity.

Table A.15. Conflict Trends and Typology

		Intrastate				
	Interstate	One-Sided State	State v. Nonstate	Organized Societal	Spontaneous Societal	
High Intensity: Battle deaths of 100,000 per year or 500,000 total	•	gh-intensity conflict more common in th				
Medium Intensity: Battle deaths of 1,000 per year or 100,000 total	198	80s and early 1990s				
Low Intensity: Battle deaths of 25 per year or 1,000 total				Since ~2001, c		
Minimum Violence: Battle deaths of 0– 25 per year; nonviolent conflict/dispute				been increasi intensity and		

As noted in the introduction, there are certain types of violence that are captured in the typology but are not covered in this review, due largely to data limitations. Most important among these is violence related to criminal enterprises, gangs, drug production, and trafficking. This violence may be relatively minor in some cases, but severe and consequential in others, reaching levels equivalent to the high- and medium-intensity categories in or typology. Furthermore, while criminal violence is decreasing in many places, it is increasing in others, such as Central America and the Caribbean. Thus, even as violence declines in the aggregate, there are places where conflict and violence are increasing and becoming increasingly severe threats to international security.

We also noted that while high-intensity and interstate conflicts are likely to be accurately recorded over the entire 1946–2015 period, the same may not be true for low-intensity, intrastate,

and nonstate conflicts and violence. Because most data sets rely on reporting and media coverage to count conflicts, smaller conflicts that attract less attention and forms of violence—such as protests, riots, and demonstrations—may be unintentionally excluded as a result of poor or inconsistent reporting. This will be especially true in earlier decades, such as the 1940s and 1950s, and in developing countries. Improvement in the quality and frequency of reporting, therefore, may lead to an apparent increase in the number of conflicts reported, even if their true incidence has remained the same or even decreased. This systematic bias will affect most of our data sets and works in the same direction as the trends we appear to observe in low-intensity violence; namely, general persistence and some increase. Ultimately, we cannot entirely correct for this bias, but we have tried to note areas where it will be most important and where it presents some caveats to our more general observations.

Changes in the frequency and intensity of conflict may be caused by a number of domestic, international, and systemic factors. These are outlined completely in the companion report to this document, <sup>23</sup> but a few of particular relevance include:

- spread of democracy and democratic norms
- spread of international norms, including those of pacific conflict resolution and territorial integrity
- U.S. hegemony and systemic changes following the end of the Cold War
- trade interdependence
- diffusion of technology
- proliferation of international organizations.

Certain of these factors may apply most directly to certain types of conflict, while others may apply broadly to multiple types. In reality, it is likely that the interaction of several factors is required to fully explain or understand the trends described in this report.

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<sup>&</sup>lt;sup>23</sup> Stephen Watts, Jennifer Kavanagh, Bryan Frederick, Tova C. Norlen, Angela O'Mahony, Phoenix Voorhies, and Thomas S. Szayna, *Understanding Conflict Trends: A Review of the Social Science Literature on the Causes of Conflict*, Santa Monica, Calif.: RAND Corporation, RR-1063/1, 2017.

This appendix presents supplementary information on the Alternative Futures Tool developed as part of the New Conflict Trends project.

#### Introduction

The Alternative Futures Tool allows users to assess the impact of alternative trends in up to three key factors on future conflict trends. Taken together, the range of one, two, and three key factor positive and negative changes from their baseline projections produces 1,160 alternative futures. For each of these alternative futures, the tool includes:

- signposts to identify changes in each key factor
- projected trends for each key factor
- expected effect of each key factor change on interstate and intrastate conflict trends
- overall interstate and intrastate conflict trends expectations.

Figure B.1 presents an overview of the user interface for the tool. In the upper left section, users select up to three key factors to evaluate, based on pull-down menus that list the ten key factors. For each selection, the user also selects whether to evaluate changes in each key factor that are above or below their projected baseline values.

The upper middle and right sections provide information on what to expect about each key factor if it were to vary from its baseline projection. For each key factor selected, the upper middle section displays signposts that would signal a change in the key factor. The upper right section displays the most-likely above- or below-baseline range of variation expected based on historical patterns for each key factor.

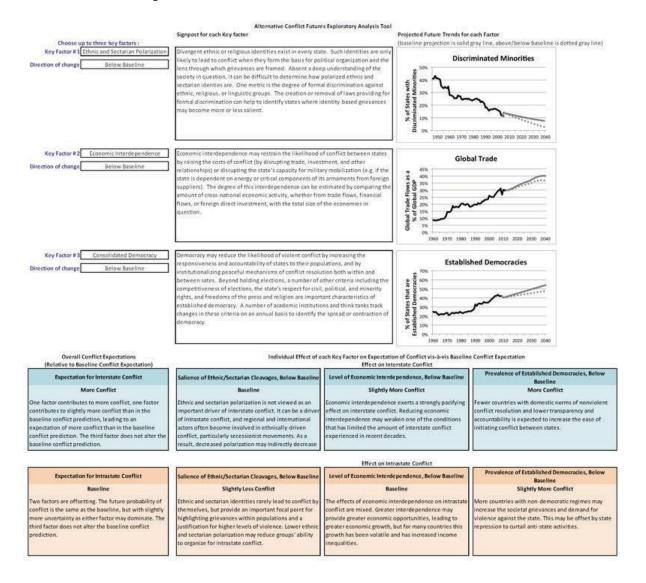
The lower sections report assessments about how the selected key factor changes individually and how it affects interstate and intrastate future conflict expectations in combination with other selected factors. All of the assessments are based on changes from the baseline expectation that the incidence and intensity of interstate and intrastate conflict are likely to decline further between 2016 and 2040. The first row (in blue) contains the interstate conflict expectations. The second row (in brown) contains the intrastate conflict expectations. The left-most box in each row is the overall conflict trend expectation, while the three boxes on the right are the individual effects of each key factor change on future conflict expectations.

In the following sections, we discuss the individual effects of each key factor on interstate and intrastate conflict, present signposts for each key factor, and explain the combinatorial rules we developed to code overall conflict trend expectations.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> The key factor projections and their range of variation are explained in detail in Chapter Three and are not discussed in this appendix.

Figure B.1. Overview of the Alternative Futures User Interface



#### **Key Factor Signposts**

Through our assessment of the social science literature on the causes of conflict, we identified ten key factors that affect the incidence and intensity of interstate and intrastate conflict. We present our full assessment of conflict studies in Appendix C. We discuss our ten key factors and our assessments of their effects on interstate and intrastate conflict in detail in Chapter Three, which focused on identifying empirical proxies to measure each key factor so that we could develop baseline projections and identify the ranges of variation within which we expected each factor to vary in the future. We include these projections as visual displays in our exploratory analysis tool, but recognize that these metrics do not fully capture their underlying factors. In this section, we provide qualitative descriptions that we include in the tool to identify a more-diverse set of signposts to watch out for in the future. Table B.1 presents each of the descriptions by key factor as it appears in the tool.

**Table B.1. Key Factor Signposts** 

Key Factor	Signpost
Capacity of state institutions	States with high levels of institutional capacity are better able to provide such public goods as infrastructure or security to their populations and to maintain effective and disciplined security services. A change in the share of the population with access to public goods is a good measure of whether state capacity is changing over time and, in turn, whether the state has the capacity to respond to challenges that threaten to lead to internal conflict.
Degree of ethnic and sectarian polarization	Divergent ethnic or religious identities exist in every state. Such identities are only likely to lead to conflict when they form the basis for political organization and the lens through which grievances are framed. Absent a deep understanding of the society in question, it can be difficult to determine how polarized ethnic and sectarian identities are. One metric is the degree of formal discrimination against ethnic, religious, or linguistic groups. The creation or removal of laws providing for formal discrimination can help to identify states where identity-based grievances might become more or less salient.
Prevalence of consolidated democracies	Democracy might reduce the likelihood of violent conflict by increasing the responsiveness and accountability of states to their populations, and by institutionalizing peaceful mechanisms of conflict resolution both within and between sates. Beyond holding elections, a number of other criteria—including the competitiveness of elections; the state's respect for civil, political, and minority rights; and freedoms of the press and religion—are important characteristics of established democracy. A number of academic institutions and think tanks track changes in these criteria on an annual basis to identify the spread or contraction of democracy.
Rate of economic growth	Conflict expectations are affected by countries' short-term and long-term economic growth. Sharp reversals from previous growth rates increase the probability of conflict, as societal expectations no longer seem likely to be fulfilled and these disappointments are translated into the political sphere. States that have achieved high levels of economic development are less likely to become involved in conflict overall. It is therefore important for analysts to look both at the growth rate a state is experiencing relative to its recent past as well as the aggregate level of economic development that the state has achieved.

Key Factor	Signpost		
Extent of economic interdependence	Economic interdependence might restrain the likelihood of conflict between states by raising the costs of conflict (e.g., by disrupting trade, investment, and other relationships) or disrupting the state's capacity for military mobilization (e.g., if the state is dependent on energy or critical components of its armaments from foreign suppliers). The degree of this interdependence can be estimated by comparing the amount of cross national economic activity, whether from trade flows, financial flows, or foreign direct investment, with the total size of the economies in question.		
Capabilities of international organizations	International organizations, whether global like the UN or regional like the Economic Community of West African States, have the potential to discourage conflict through peacekeeping, mediation, and other conflict-management activities. The likelihood that these organizations will act to discourage conflict is dependent on their capacity, which can be highly variable depending on the support of their member states. This capacity can be roughly estimated through the budgets or levels of activity of these organizations.		
Degree of U.S. preeminence	The United States can deter other states from initiating conflicts by threatening to intervene. The greater the degree of U.S. preeminence, the more circumstances there are in which the United States can credibly threaten to intervene. The relative power and influence of the United States can be measured in several ways. In the short term, comparisons of military and power projection capabilities, and diplomatic and cultural interactions are important. Over the long term, the economic base of the United States will largely determine its ability to sustain and project power. Comparing the economic capacity of the United States and other states provides a good long-term method to identify changes in U.S. preeminence.		
Strength of international norms	International norms are difficult to measure effectively. Statements of support are important but insufficient, and they may be cheap talk. Alternatively, states may feel pressured to adhere to a norm but be unwilling to publicly acknowledge that pressure. Flagrant and unpunished violations of norms represent clear signs that the strength of a norm has degraded, but such measures may be apparent too late to be useful to analysts. The ratification and maintenance in force of treaty commitments embodying a norm, which can be both acceded to or withdrawn from, provide a more sensitive leading indicator of the relative strength of norms over time.		
Diffusion of lethal technology	The diffusion of lethal technologies—such as nuclear weapons, precision munitions, chemical and biological weapons and disruptive cyber technology—to a wider range of states signals a global increase. Tracking the diffusion of many of these technologies through unclassified sources may be difficult, with the possible exception of nuclear and chemical weapon programs, given their larger scale and greater public attention.		
Extent of resource stress because of population pressures	Resource stresses because of population pressures can be identified through leading indicators such as increases in population pressures or through more proximate measures of resource scarcity. Population pressures such as youth bulges, urbanization, and aging populations can signal potential population pressures. Increasingly scarce access to food and potable water are strong signals of resource scarcities that will increase societal vulnerabilities.		

## Effect of Key Factor Changes on Conflict Trends Expectations

Building on our analyses of how our ten key factors influence interstate and intrastate conflict presented in Chapter Three and summarized in Table 3.1, we identified the expected magnitude and direction of changes in our projection of future interstate and intrastate conflict based on changes in each of the key factors. Table 3.1 presented our assessment of each factor's effect on the prevalence of conflict based on our extensive literature review. We used these results as our expectations for how changes in each key factor above or below its projected baseline would alter the baseline interstate and intrastate conflict projection presented in

Chapter Four. We present this framework in Table B.2. For each factor, we examined whether an above-baseline projection or a below-baseline projection of the key factor was likely to contribute to more conflict, slightly more conflict, less conflict, or slightly less conflict than in our baseline conflict projections.

Key factor changes that we expect to contribute to more conflict are coded red in Table B.2; for example, we expect a decline in state capacity to contribute to more intrastate conflict. Key factor changes that we expect to contribute to slightly more conflict are coded orange; we expect an increase in ethnic and sectarian polarization to contribute to slightly more interstate conflict. Conversely, key factors that we expect to contribute to less conflict and slightly less conflict are coded dark green and light green, respectively. We expect a greater prevalence of consolidated democracies to contribute to less interstate conflict, while greater economic growth should contribute to slightly less interstate conflict. Finally, key factor changes that we do not expect to affect the baseline conflict projection are coded white (e.g., increases or decreases in state capacity on interstate conflict).

Table B.2. Expected Effect of Individual Key Factor Changes on Conflict Incidence Relative to RAND Conflict Projections

Expected Effect of Change in Factor on Conflict Incidence			
Interstate Conflict		Intrastate Conflict	
Increase in Key Factor	Decrease in Key Factor	Increase in Key Factor	Decrease in Key Factor
	Interstate Increase in	Interstate Conflict Increase in Decrease in	Interstate Conflict Intrasta Increase in Decrease in Increase in

In the Alternative Futures Tool, we report how we expect each key factor change to affect interstate and intrastate conflict vis-à-vis our baseline conflict expectation, and why we expect this relationship. (This is presented in the lower left section of Figure B.1.) Table B.3 reports our future conflict expectations and explanations for the individual effects of each key factor change for future interstate conflict. These explanations highlight the key findings from our literature review. Table B.4 does the same for intrastate conflict.

Table B.3. Individual Effects of Key Factor Changes on Expectation of Interstate Conflict vis -à-vis

Baseline Conflict Projection

Key factor Capacity of state institutions

Direction of key factor change Above baseline

Conflict expectation Baseline

Explanation Capacity of state institutions is generally not seen as a driver of interstate conflict.

However, some states, particularly in Sub-Saharan Africa, may be inhibited from pursuing interstate conflicts because of their extremely low levels of institutional capacity. Increased state capacity in countries with very low initial levels of state capacity may create capacity for governments to engage in interstate conflict.

Key factor Capacity of state institutions

Direction of key factor change Below baseline

Conflict expectation Baseline

Explanation Capacity of state institutions is generally not seen as a driver of interstate conflict.

However, some states, particularly in Sub-Saharan Africa, may be inhibited from pursuing interstate conflicts because of their extremely low levels of institutional capacity. Increased state capacity in countries with very low initial levels of state capacity may create capacity for governments to engage in interstate conflict.

Key factor Degree of ethnic and sectarian polarization

Direction of key factor change Above baseline

Conflict expectation Slightly more conflict

Explanation Ethnic and sectarian polarization is not viewed as an important driver of interstate

conflict. It can be a driver of intrastate conflict, and regional and international actors often become involved in ethnically driven conflict, particularly secessionist movements. As a result, increased polarization may indirectly increase interstate

conflict.

Key factor Degree of ethnic and sectarian polarization

Direction of key factor change Below baseline

Conflict expectation Baseline

Explanation Ethnic and sectarian polarization is not viewed as an important driver of interstate

conflict. It can be a driver of intrastate conflict, and regional and international actors often become involved in ethnically driven conflict, particularly secessionist movements. As a result, decreased polarization may indirectly decrease interstate

conflict.

Key factor Prevalence of consolidated democracy

Direction of key factor change Above baseline Conflict expectation Less conflict

Explanation When more countries have domestic norms of nonviolent conflict resolution and there

is greater democratic transparency and accountability, reduced conflict between states is expected. However, the initial stages of democratization increase the

likelihood of interstate conflict.

Key factor Prevalence of consolidated democracy

Direction of key factor change Below baseline Conflict expectation More conflict

Explanation A situation where fewer countries have domestic norms of nonviolent conflict

resolution, along with lower transparency and accountability, is expected to increase

the ease of initiating conflict between states.

Key factor Rate of economic growth Direction of key factor change Above baseline Conflict expectation Slightly less conflict Explanation As countries achieve greater levels of economic development, they generally are less likely to engage in interstate conflict. However, increases in wealth from very low levels could give some states, particularly in Sub-Saharan Africa, the capacity to pursue interstate conflicts they previously lacked. Key factor Rate of economic growth Direction of key factor change Below baseline Conflict expectation Slightly more conflict Explanation Declining economic growth rates may exacerbate economic grievances and reduce the opportunity costs of conflict with regard to forgone economic opportunities that might otherwise reduce the probability of interstate conflict. Key factor Extent of economic interdependence Direction of key factor change Above baseline Conflict expectation Less conflict Explanation Economic interdependence exerts a strongly pacifying effect on interstate conflict. Potential disruptions of trade during crises increase the costs of pursuing interstate conflicts. Trade allows states to access natural resources without controlling them, reducing the incentive for states to try to control them through conquest. Trade strengthens domestic lobbies with an interest in preserving peace with trading partners. However, greater interaction through trade increases the number of trade disputes, some of which could escalate to violence. Extent of economic interdependence Key factor Direction of key factor change Below baseline Conflict expectation Slightly more conflict Explanation Economic interdependence exerts a strongly pacifying effect on interstate conflict. Reducing economic interdependence may weaken one of the conditions limiting the amount of interstate conflict experienced in recent decades. Key factor Capabilities of international organizations Direction of key factor change Above baseline Conflict expectation Slightly less conflict Explanation International organizations spread norms of pacific international behavior, undertake peacekeeping missions, and provide useful forums for the resolution of disputes. These activities reduce conflict between states. Increasing international organizations' capabilities into more areas of dispute or with greater resources/consensus could have further pacifying effects at the interstate level. Key factor Capabilities of international organizations Direction of key factor change Below baseline Conflict expectation More conflict Explanation International organizations spread norms of pacific international behavior, undertake peacekeeping missions, and provide useful forums for the resolution of disputes. Fewer activities for mitigating disputes in the international system is likely to lead to more interstate conflict. Key factor Degree of U.S. preeminence Direction of key factor change Above baseline Conflict expectation Slightly less conflict Explanation Greater U.S. preeminence is expected to somewhat reduce the probability of conflict compared with the baseline prediction. Great power conflict is unlikely because of the scope of U.S. military primacy, and the United States uses its influence to actively discourage conflict between lesser powers. However, the U.S. role in enforcing the international order increases the number of conflicts in which the United States becomes involved.

Key factor	Degree of U.S. preeminence		
Direction of key factor change	e Below baseline		
Conflict expectation	More conflict		
Explanation	Lower U.S. preeminence increases the probability of interstate conflict because the deterrent effect of U.S. military primacy and intervention is no longer as powerful.		
Key factor	Strength of international norms		
Direction of key factor change	e Above baseline		
Conflict expectation	Slightly less conflict		
Explanation	Strengthening the territorial integrity norm increases potential costs of interstate conflict to states initiating new territorial disputes by increasing the probability that they will face international sanctions. This decreases the probability of interstate conflict.		
Key factor	Strength of international norms		
Direction of key factor change	e Below baseline		
Conflict expectation	Slightly more conflict		
Explanation	Weakening the territorial integrity norm decreases the potential costs of interstate conflict to states initiating new territorial disputes by decreasing the probability that they will face international sanctions. This increases the probability of interstate conflict.		
Key factor	Diffusion of lethal technology		
Direction of key factor change	e Above baseline		
Conflict expectation	Slightly more conflict		
Explanation	Diffusion of lethal technology increases the deadliness of interstate conflict, and tends to equalize capabilities between states, making interstate conflict more likely.		
Key factor	Diffusion of lethal technology		
Direction of key factor change	e Below baseline		
Conflict expectation	Baseline		
Explanation	Lower diffusion of lethal technology will not reduce the technology that already exists and should have no impact on the baseline conflict prediction.		
Key factor	Extent of resource stress because of population pressures		
Direction of key factor change	e Above baseline		
Conflict expectation	Baseline		
Explanation	Although resource stress because of population pressures has been associated with greater incidence of conflict, almost all analyses find that these stresses only contribute to conflict indirectly, and generally only to interstate conflict because of an internationalization of intrastate conflict.		
Key factor	Extent of resource stress because of population pressures		
Direction of key factor change	e Below baseline		
Conflict expectation	Baseline		
Explanation	Although resource stress because of population pressures has been associated with greater incidence of conflict, almost all analyses find that these stresses only contribute to conflict indirectly, and generally only to interstate conflict because of an internationalization of intrastate conflict.		

Table B.4. Individual Effects of Key Factor Changes on Expectation of Intrastate Conflict vis -à-vis

Baseline Conflict Projection

Key factor	Capacity of state institutions
Direction of key factor change	Above baseline
Conflict expectation	Less conflict
Explanation	Highly capable state institutions are one of the key deterrents to intrastate conflict. States with high capacity are able to develop security services to fight insurgencies, and to provide public goods and services to their population, which reduces the grievances that make militant groups popular.
Key factor	Capacity of state institutions
Direction of key factor change	Below baseline
Conflict expectation	More conflict
Explanation	Low-capacity states are most likely to experience conflict because they provide potential militant groups with the means and opportunity to initiate conflict and because these states are themselves unable to control or stop insurgencies.
Key factor	Degree of ethnic and sectarian polarization
Direction of key factor change	Above baseline
Conflict expectation	Slightly more conflict
Explanation	Ethnic and sectarian identities rarely lead to conflict by themselves, but provide an important focal point for highlighting grievances within populations and a justification for higher levels of violence. Greater salience of ethnic and sectarian cleavages may interact with other factors to increase intrastate conflict.
Key factor	Degree of ethnic and sectarian polarization
Direction of key factor change	Below baseline
Conflict expectation	Slightly less conflict
Explanation	Ethnic and sectarian identities rarely lead to conflict by themselves, but provide an important focal point for highlighting grievances within populations and a justification for higher levels of violence. Lower salience of ethnic and sectarian cleavages may reduce groups' ability to organize for intrastate conflict.
Key factor	Prevalence of consolidated democracy
Direction of key factor change	Above baseline
Conflict expectation	Slightly less conflict
Explanation	More consolidated democracies should reduce the incidence of such one-sided government violence as state repression and genocide, but could still leave states vulnerable to terrorism and insurgencies. Fully democratic states are less prone to intrastate conflict, but democratizing states are highly prone to intrastate conflict.
Key factor	Prevalence of consolidated democracy
Direction of key factor change	Below baseline
Conflict expectation	Slightly more conflict
Explanation	More countries with nondemocratic regimes might increase the societal grievances and demand for violence against the state. This could be offset by state repression to curtail antistate activities.
Key factor	Rate of economic growth
Direction of key factor change	Above baseline
Conflict expectation	Less conflict
Explanation	Increasing personal incomes, declining income inequality, and lower income volatility reduce the likelihood of intrastate violence.

Key factor	Rate of economic growth
Direction of key factor change	Below baseline
Conflict expectation	More conflict
Explanation	Low and declining personal incomes, economic grievances (particularly economic inequality), and sudden adverse economic shocks are strong drivers of intrastate violence.
Key factor	Extent of economic interdependence
Direction of key factor change	Above baseline
Conflict expectation	Baseline
Explanation	The effects of economic interdependence on intrastate conflict are mixed. Greater interdependence may provide greater economic opportunities, leading to greater economic growth, but for many countries, this growth has been volatile and has increased income inequalities.
Key factor	Extent of economic interdependence
Direction of key factor change	Below baseline
Conflict expectation	Baseline
Explanation	The effects of economic interdependence on intrastate conflict are mixed. Greater interdependence may provide greater economic opportunities, leading to greater economic growth, but for many countries this growth has been volatile and has increased income inequalities.
Key factor	Capabilities of international organizations
Direction of key factor change	Above baseline
Conflict expectation	Baseline
Explanation	International organizations spread norms of pacific international behavior, undertake peacekeeping missions, and provide useful forums for the resolution of disputes. These activities have led to conflict-mitigation at the intrastate level. However, greater advancement in international organizations' capabilities do not appear to be focused on intrastate conflict and therefore are expected to have greater impact at the interstate level than at the intrastate level.
Key factor	Capabilities of international organizations
Direction of key factor change	Below baseline
Conflict expectation	Slightly more conflict
Explanation	Declines in international organizations' capabilities to engage in peace operations, multilateral aid provision, or dispute resolution would increase the probability of intrastate conflict.
Key factor	Degree of U.S. preeminence
Direction of key factor change	Above baseline
Conflict expectation	Baseline
Explanation	Greater U.S. preeminence is not expected to change baseline conflict predictions.
Key factor	Degree of U.S. preeminence
Direction of key factor change	Below baseline
Conflict expectation	Slightly more conflict
Explanation	Declining U.S. preeminence may increase the probability of conflict as the deterrent effect of U.S. intervention declines.
Key factor	Strength of international norms
Direction of key factor change	Above baseline
Conflict expectation	Slightly less conflict
Explanation	Strengthening norms of "human security" and humanitarian intervention may deter or shorten intrastate conflicts. Despite the spread of nonviolent norms, their diffusion has not been universal. There are still countries and nonstate actors that openly ignore norms against conflict and violence in their dealings with other states and their own populations.

Key factor	Strength of international norms
Direction of key factor change	Below baseline
Conflict expectation	Slightly more conflict
Explanation	Weakening norms of "human security" and humanitarian intervention may increase the prevalence of intrastate conflict.
Key factor	Diffusion of lethal technology
Direction of key factor change	Above baseline
Conflict expectation	Slightly more conflict
Explanation	Diffusion of lethal technology increases nonstate actors' access to lethal technology. This could increase the lethality of intrastate conflict, potentially equalizing capabilities between states and insurgency groups, making intrastate conflict more likely.
Key factor	Diffusion of lethal technology
Direction of key factor change	Below baseline
Conflict expectation	Baseline
Explanation	Lower diffusion of lethal technology will not reduce the technology that already exists and should have no impact on the baseline conflict prediction.
Key factor	Extent of resource stress because of population pressures
Direction of key factor change	Above baseline
Conflict expectation	Slightly more conflict
Explanation	Countries with youth bulges, and countries experiencing scarcities of renewable resources (e.g., water, arable land, forests) may increase the probability of intrastate conflict, particularly in states with low state capacity, low economic growth and other salient grievances.
Key factor	Extent of resource stress because of population pressures
Direction of key factor change	Below baseline
Conflict expectation	Baseline
Explanation	Reducing resource stress because of population pressure is not expected to have a significant independent pacifying effect on intrastate conflict.

## **Overall Conflict Trend Expectations**

For each alternative future, we present overall interstate and intrastate conflict trend expectations. These are displayed in the left-hand blue and brown boxes at the bottom of Figure B.1. To aggregate the individual key factor effects into overall conflict trend expectations, we developed 50 combinatorial rules. These rules are logical constructs designed to produce results that mirrored the findings from our literature review with regard to changes in conflict expectations in the presence of multiple factors associated with conflict.

Many of the rules are straightforward. For example, if only one key factor is chosen in the tool, or if only one factor change results in a change in the baseline conflict projection, then the overall conflict expectation equals that of the individual key factor change (rules 1, 15, 16, 25, 28, 38, 41). If all of the chosen key factor changes result in no expected change to the baseline, then the overall conflict expectation is no change from the baseline (rules 2, 36). If all of the chosen factors result in a change in the conflict expectation that are in the same direction (or do not project any change in the baseline) and at least one projects more conflict than in the baseline projection, then the overall conflict expectation is more conflict than the baseline projection

(rules 5, 7, 9, 17, 18, 19, 20, 21). Similarly, if all of the chosen factors result in a change in the conflict expectation that are in the same direction (or do not project any change in the baseline) and at least one projects less conflict than in the baseline projection, then the overall conflict expectation is less conflict than the baseline projection (rules 6, 8, 11, 45, 48, 49, 50). Finally, perfectly offsetting factor changes—e.g., one key factor change resulting in an expectation of more conflict than the baseline and a second key factor change resulting in an expectation of less conflict than the baseline—were coded as no expected change from the baseline, but with a greater uncertainty as either factor may dominate (rules 3, 4, 32, 33).

A second set of rules addresses alternative futures in which the direction of the effect is clear, but the magnitude of the effect is not. For example, in an alternative future in which two key factor changes are expected to contribute to slightly more conflict than in the baseline, while the third factor change is not expected to change the baseline, the direction of the change to the baseline is clear (an increase), but the magnitude of the increase is not. To address this, the team worked through a series of narratives and judged that two key factors that contribute to slightly more conflict than in the baseline projection were insufficient to equal more conflict than in the baseline projection (rules 10, 24). However, three key factor changes that all resulted in slightly more conflict than the baseline did appear sufficient in combination to warrant an expectation of more conflict than the baseline projection (rule 22). This also applied in the cases of two and three key factor changes resulting in slightly less conflict than the baseline projection (rules 12, 43, and rule 47).

A third set of rules involves competing effects that are not fully offsetting. We expect that the net effect on conflict will be in the direction of the effects with the larger magnitude, but that they will be slightly offset by the competing effects, and that the uncertainty of outcomes in those futures will increase. For example, in cases in which there is one factor change that is expected to contribute to more conflict than in the baseline and a second factor change that is expected to contribute to slightly less conflict than expected, the increased conflict expectation from the first factor outweighs the slight decline from the second factor. (Futures with offsetting factors that result in slightly more conflict than the baseline conflict projection are rules 13, 26, 27, 29, 30, 31, 35. Futures with offsetting factors that result in slightly less conflict are rules 14, 34, 37, 39, 40, 42, 44).

In contrast, in cases in which there are two factor changes that are expected to contribute to more conflict than in the baseline and a third factor change that is expected to contribute to slightly less conflict than expected, the slight decrease in conflict expectation from the third factor is insufficient to outweigh the increase in baseline conflict expectations from the first two factors. We expect the net result in this type of alternative future to be more conflict than in the baseline expectation (rule 23). A parallel logic is applied when two factor changes are expected to contribute to less conflict than in the baseline and a third factor change is expected to contribute to slightly more conflict than expected (rule 46).

Overall, alternative futures in which we expect more conflict than in the baseline conflict projection are ones in which one of the following conditions hold:

- At least one factor contributes to more conflict and the other factors contribute to slightly more conflict or do not differ from the baseline.
- All three factors contribute to slightly more conflict.
- Two factors contribute to more conflict while one factor contributes to slightly less conflict.

Alternative futures in which we expect slightly more conflict than in the baseline conflict projection are ones in which one of the following conditions hold:

- Two factors contribute to slightly more conflict while the third factor either contributes to slightly less conflict or does not differ from the baseline.
- One factor contributes to more conflict, one factor to slightly less conflict, and the third factor can vary from slightly less conflict through slightly more conflict.
- One factor contributes to more conflict, one factor to slightly more conflict, and one factor contributes to less conflict or slightly less conflict.
- Two factors contribute to more conflict while one factor contributes to less conflict.

Alternative futures in which we expect no change in the baseline conflict projection are ones in which one of the following conditions hold:

- No factor contributes to an effect that is different than the baseline.
- Two factors have equal and offsetting effects and the third factor does not contribute to an effect that is different than the baseline.

Alternative futures in which we expect slightly less conflict than in the baseline conflict projection are ones in which one of the following conditions hold:

- Two factors contribute to slightly less conflict while the third factor either contributes to slightly more conflict or does not differ from the baseline.
- One factor contributes to less conflict, one factor to slightly more conflict, and the third factor can vary from slightly less conflict through slightly more conflict.
- One factor contributes to less conflict, one factor to slightly less conflict, and one factor contributes to more conflict or slightly more conflict.
- Two factors contribute to less conflict while one factor contributes to more conflict.

Alternative futures in which we expect less conflict than in the baseline conflict projection are ones in which one of the following conditions hold:

- At least one factor contributes to less conflict and the other factors contribute to slightly less conflict or do not differ from the baseline.
- All three factors contribute to slightly less conflict.
- Two factors contribute to less conflict while one factor contributes to slightly more conflict.

A couple of caveats with regard to these combinatorial rules are necessary. First, the combinatorial rules are not specific to any individual key factor. They are designed to capture the effect of the interaction of reinforcing or competing key factor influences. As such, the combinatorial rules treat all factors as equal. We recognize that this may not hold true. Second, we expect that the combinatorial rules developed here present likely future scenarios for each of the alternative futures included in the Alternative Futures Tool. However, we recognize that each overall projection reflects only one potential path and that other paths could also occur. As a result, the overall conflict expectations are presented in addition to, rather than instead of, the individual key factor effects, so that planners can see the component parts of each future. Also, for futures that involve cross-cutting effects, (for example, one factor that points toward more conflict and another factor that points toward less), we highlight the greater uncertainty engendered by these competing effects in our explanations.

Table B.5 presents the 50 combinatorial rules that we used to program the overall interstate and intrastate conflict trend expectations. Each table entry identifies

- the combinatorial rule number
- the future conflict expectation (more conflict, slightly more conflict, baseline, slightly less conflict, or less conflict)
- the number of factors in the futures to which the rules applies (1, 2, or 3)
- the key factor coding for each of the key factors included in the alternative futures to which the rule applies (more conflict, slightly more conflict, baseline, slightly less conflict, or less conflict)
- the description included in the tool to elaborate on the overall conflict expectation and identify futures with greater predictive uncertainty.

Table B.6 presents the distribution of alternative futures for each combinatorial rule for interstate and intrastate conflict.

**Table B.5. Overall Conflict Trend Expectation Combinatorial Rules** 

Rule number	
Conflict expectation	Same as key factor
# of key factors	1 Varian
Key factor coding	Varies
Description	The future probability of conflict is the same as the individual effect of the key factor on the relative probability of conflict vis-à-vis the baseline prediction.
Rule number	2
Conflict expectation	Baseline
# of key factors	2 Post fortuna havaffar
Key factor coding	Both factors: baseline
Description	Neither key factor is predicted to alter the baseline conflict prediction.
Rule number	3 Describes
Conflict expectation	Baseline
# of key factors	2  Koy factor 1: clightly more conflict; koy factor 2: clightly loss, conflict
Key factor coding Description	Key factor 1: slightly more conflict; key factor 2: slightly less conflict  The two key factors are offsetting. The future probability of conflict is the same as the baseline, but with slightly more uncertainty as either factor may dominate.
Rule number	4
Conflict expectation	Baseline
# of key factors	2
Key factor coding	Key factor 1: more conflict; key factor 2: less conflict
Description	The two key factors are offsetting. The future probability of conflict is the same as the
2000	baseline, but with greater uncertainty as either factor may dominate.
Rule number	5
Conflict expectation	More conflict
# of key factors	2
Key factor coding	Both key factors: more conflict
Description	Both key factors contribute to an expectation of more conflict than in the baseline
•	conflict prediction.
Rule number	6
Conflict expectation	Less conflict
# of key factors	2
Key factor coding	Both key factors: less conflict
Description	Both key factors contribute to an expectation of less conflict than in the baseline conflict prediction.
Rule number	7
Conflict expectation	More conflict
# of key factors	2
Key factor coding	Key factor 1: more conflict; key factor 2: slightly more conflict
Description	Both key factors contribute to more conflict or slightly more conflict, leading to an expectation of more conflict than in the baseline conflict prediction.
Rule number	8
Conflict expectation	Less conflict
# of key factors	2
Key factor coding	Key factor 1: less conflict; key factor 2: slightly less conflict
Description	Both key factors contribute to less conflict or slightly less conflict, leading to an
	expectation of less conflict than in the baseline conflict prediction.
Rule number	9
Conflict expectation	More conflict
# of key factors	2
Key factor coding	Key factor 1: more conflict; key factor 2: baseline
Description	One factor contributes to an expectation of more conflict than in the baseline conflict prediction. The second factor does not alter the baseline conflict prediction.
Rule number	10
Conflict expectation	Slightly more conflict
# of key factors	2
Key factor coding	Both key factors: slightly more conflict
Description	Both key factors contribute to an expectation of slightly more conflict than in the

Rule number	
Conflict expectation	11 Less conflict
# of key factors	2
Key factor coding	Key factor 1: Less conflict; key factor 2: baseline
Description	One factor contributes to an expectation of less conflict than in the baseline conflict
Description	prediction. The second factor does not alter the baseline conflict prediction.
Rule number	12
Conflict expectation	Slightly less conflict
# of key factors	2
Key factor coding	Both key factors: slightly less conflict
Description	Both key factors contribute to an expectation of slightly less conflict than in the baseline
•	conflict prediction.
Rule number	13
Conflict expectation	Slightly more conflict
# of key factors	2
Key factor coding	Key factor 1: more conflict; key factor 2: slightly less conflict
Description	One factor contributes to an expectation of more conflict than in the baseline conflict
	prediction. This may be offset somewhat by the environment with slightly less conflict
	created by the second factor.
Rule number	14
Conflict expectation	Slightly less conflict
# of key factors	2
Key factor coding	Key factor 1: less conflict; key factor 2: slightly more conflict
Description	One factor contributes to an expectation of less conflict than in the baseline conflict
	prediction. This may be offset somewhat by the environment with slightly more conflict
D. I	created by the second factor.
Rule number	15
Conflict expectation	Slightly more conflict
# of key factors	2
Key factor coding	Key factor 1: slightly more conflict; key factor 2: baseline
Description	One factor contributes to an expectation of slightly more conflict than in the baseline conflict prediction. The second factor does not alter the baseline conflict prediction.
Rule number	16
Conflict expectation	Slightly less conflict
# of key factors	2
Key factor coding	Key factor 1: slightly less conflict; key factor 2: baseline
Description	One factor contributes to an expectation of slightly less conflict than in the baseline
	conflict prediction. The second factor does not alter the baseline conflict prediction.
Rule number	17
Conflict expectation	More conflict
# of key factors	3
Key factor coding	All key factors: more conflict
Description	All three key factors contribute to an expectation of more conflict than in the baseline
	conflict prediction.
Rule number	18
Conflict expectation	More conflict
# of key factors	3
Key factor coding	Key factors 1 and 2: more conflict; key factor 3: slightly more conflict
Description	Two factors contribute to more conflict and one factor contributes to slightly more
	conflict than in the baseline conflict prediction, leading to an expectation of more conflict
Pulo numbor	than in the baseline conflict prediction.
Rule number	19 More conflict
Conflict expectation	More conflict
# of key factors	3  Voy factor 1: mare conflict: key factors 2 and 2: alightly mare conflict.
Key factor coding	Key factor 1: more conflict; key factors 2 and 3: slightly more conflict
Description	One factor contributes to more conflict and two factors contribute to slightly more
	conflict than in the baseline conflict prediction, leading to an expectation of more conflict
	than in the baseline conflict prediction.

Pulo number	20
Rule number Conflict expectation	20 More conflict
# of key factors	3
Key factor coding	Key factors 1 and 2: more conflict; key factor 3: baseline
Description	Two factors contribute to an expectation of more conflict than in the baseline conflict
Boompaon	prediction. The third factor does not alter the baseline conflict prediction.
Rule number	21
Conflict expectation	More conflict
# of key factors	3
Key factor coding	Key factor 1: more conflict; key factor 2: slightly more conflict; key factor 3: baseline
Description	One factor contributes to more conflict, one factor contributes to slightly more conflict than in the baseline conflict prediction, leading to an expectation of more conflict than in the baseline conflict prediction. The third factor does not alter the baseline conflict prediction.
Rule number	22
Conflict expectation	More conflict
# of key factors	3
Key factor coding	All key factors: slightly more conflict
Description	All three key factors contribute to an expectation of slightly more conflict than in the baseline conflict prediction. The combination contributes to an expectation of more
	conflict than in the baseline conflict prediction.
Rule number	23
Conflict expectation	More conflict
# of key factors	3
Key factor coding	Key factors 1 and 2: more conflict; key factor 3: slightly less conflict
Description	Two factors contribute to an expectation of more conflict than in the baseline conflict
	prediction. This may be offset somewhat by an environment with slightly less conflict
	created by the third factor; however, the expectation is that the two stronger factors will
	dominate.
Rule number	24
Conflict expectation	Slightly more conflict
# of key factors Key factor coding	3 Key factors 1 and 2: slightly more conflict; key factor 3: baseline
Description	Two factors contribute to slightly more conflict than in the baseline conflict prediction,
2000	leading to an expectation of slightly more conflict than in the baseline conflict prediction.
	The third factor does not alter the baseline conflict prediction.
Rule number	25
Conflict expectation	More conflict
# of key factors	3
Key factor coding	Key factor 1: more conflict; key factors 2 and 3: baseline
Description	One factor contributes to more conflict than in the baseline conflict prediction, leading to
	an expectation of more conflict than in the baseline conflict prediction. Two factors do
Rule number	not alter the baseline conflict prediction.  26
Conflict expectation	Slightly more conflict
# of key factors	3
Key factor coding	Key factor 1: more conflict; key factor 2: slightly more conflict; key factor 3: slightly less
,	conflict
Description	One factor contributes to an expectation of more conflict and one factor contributes to
·	an expectation of slightly more conflict than in the baseline conflict prediction. This may
	be offset somewhat by an environment with slightly less conflict created by the third
	factor.
Rule number	27 Climbally many and flight
Conflict expectation	Slightly more conflict
# of key factors	3 Key factors 1 and 2: more conflict: key factor 3: less conflict
Key factor coding  Description	Key factors 1 and 2: more conflict; key factor 3: less conflict  Two factors contribute to an expectation of more conflict than in the baseline conflict
Dogonphon	prediction. This is offset somewhat by the environment with less conflict created by the
	third factor. This future has a high degree of uncertainty in its conflict prediction
	because any of the three factors may dominate.
	•

Dula number:	20
Rule number	28 Slightly many conflict
Conflict expectation	Slightly more conflict
# of key factors	3
Key factor coding	Key factor 1: slightly more conflict; key factors 2 and 3: baseline
Description	One factor contributes to slightly more conflict than in the baseline conflict prediction,
	leading to an expectation of slightly more conflict than in the baseline conflict prediction.
	Two factors do not alter the baseline conflict prediction.
Rule number	29
Conflict expectation	Slightly more conflict
# of key factors	3
Key factor coding	Key factor 1: more conflict; key factor 2: slightly less conflict; key factor 3: baseline
Description	One factor contributes to an expectation of more conflict than in the baseline conflict
	prediction. This may be offset somewhat by the environment with slightly less conflict
	created by the second factor. The third factor does not alter the baseline conflict
	prediction.
Rule number	30
Conflict expectation	Slightly more conflict
# of key factors	3
Key factor coding	Key factor 1: more conflict; key factor 2: slightly more conflict; key factor 3: less conflict
Description	One factor contributes to an expectation of more conflict and one factor contributes to
•	an expectation of slightly more conflict than in the baseline conflict prediction. This may
	be offset by the environment with less conflict created by the third factor. This future has
	a high degree of uncertainty in its conflict prediction because any of the three factors
	may dominate.
Rule number	31
Conflict expectation	Slightly more conflict
# of key factors	3
Key factor coding	Key factors 1 and 2: slightly more conflict; key factor 3: slightly less conflict
Description	Two factors contribute to an expectation of slightly more conflict than in the baseline
F	conflict prediction. This is offset by an environment with slightly less conflict created by
	the third factor.
Rule number	32
Conflict expectation	Baseline
# of key factors	3
Key factor coding	Key factor 1: more conflict; key factor 2: less conflict; key factor 3: baseline
Description	Two factors are offsetting. The future probability of conflict is the same as the baseline,
	but with greater uncertainty because either factor may dominate. The third factor does
	not alter the baseline conflict prediction.
Rule number	33
Conflict expectation	Baseline
# of key factors	3
Key factor coding	Key factor 1: slightly more conflict; key factor 2: slightly less conflict; key factor 3:
,	baseline
Description	Two factors are offsetting. The future probability of conflict is the same as the baseline,
_ 50011ptio11	but with slightly more uncertainty as either factor may dominate. The third factor does
	not alter the baseline conflict prediction.
Dula numbar	
Rule number	34 Slightly logg conflict
Conflict expectation	Slightly less conflict
# of key factors	3
Key factor coding	Key factors 1 and 2: slightly more conflict; key factor 3: less conflict
Description	One factor contributes to an environment with less conflict. This is the strongest effect.
	Two factors contribute to an expectation of slightly more conflict than in the baseline
	conflict prediction. Overall, this contributes to an expectation of a slightly less conflict
	than in the baseline. There is greater uncertainty, however, because any of the three
	factors may dominate.

Rule number	35
Conflict expectation	Slightly more conflict
# of key factors	3
Key factor coding Description	Key factors 1 and 2: slightly less conflict; key factor 3: more conflict. One factor contributes to an environment with more conflict. This is the strongest effect. Two factors contribute to an expectation of slightly less conflict than in the baseline conflict prediction. Overall, this contributes to an expectation of slightly more conflict than in the baseline. There is greater uncertainty, however, because any of the three factors may dominate.
Rule number	36
Conflict expectation	Baseline
# of key factors Key factor coding	3 All key factors: baseline
Description	None of the three factors alters the baseline conflict prediction.
Rule number	37
Conflict expectation	Slightly less conflict
# of key factors	3
Key factor coding Description	Key factor 1: less conflict; key factor 2: slightly more conflict; key factor 3: baseline One factor contributes to an expectation of less conflict than in the baseline conflict prediction. This may be offset somewhat by an environment with slightly more conflict created by the second factor. The third factor does not alter the baseline conflict prediction.
Rule number	38
Conflict expectation	Slightly less conflict
# of key factors Key factor coding	3 Key factor 1: slightly less conflict; key factors 2 and 3: baseline
Description	One factor contributes to an expectation of slightly less conflict than in the baseline
Doddingworr	conflict prediction. Two factors do not alter the baseline conflict prediction.
Rule number	39
Conflict expectation	Slightly less conflict
# of key factors	3
Key factor coding Description	Key factor 1: less conflict; key factor 2: slightly less conflict; key factor 3: more conflict. One factor contributes to less conflict than the baseline, one factor contributes to slightly less conflict than the baseline, and one factor contributes to more conflict than the baseline. The future probability of conflict is slightly less conflict than the baseline, but with great uncertainty because any of the three factors may dominate
Rule number	40
Conflict expectation # of key factors	Slightly less conflict
Key factor coding Description	Key factors 1 and 2: slightly less conflict; key factor 3: slightly more conflict Two factors contribute to an expectation of slightly less conflict than in the baseline conflict prediction. This is offset by the slightly more conflictive environment created by the third factor.
Rule number	41
Conflict expectation	Less conflict
# of key factors Key factor coding	3 Key factor 1: less conflict; key factors 2 and 3: baseline
Description	One factor contributes to less conflict than the baseline. Two factors do not alter the
	baseline conflict prediction.
Rule number	42
Conflict expectation	Slightly less conflict
# of key factors	3  Nov factor 1: logg conflict: key factor 2: alightly logg conflict: key factor 2: alightly more
Key factor coding	Key factor 1: less conflict; key factor 2: slightly less conflict; key factor 3: slightly more conflict
Description	One factor contributes to an expectation of less conflict and one factor contributes to an expectation of slightly less conflict than in the baseline conflict prediction. This may be offset somewhat by an environment with slightly more conflict created by the third factor.

Rule number 43			
Conflict expectation	Slightly less conflict		
# of key factors	3		
Key factor coding Description	Key factors 1 and 2: slightly less conflict; key factor 3: baseline  Two factors contribute to an expectation of slightly less conflict than in the baseline		
	conflict prediction. One factor does not alter the baseline conflict prediction.		
Rule number	44		
Conflict expectation	Slightly less conflict		
# of key factors	3		
Key factor coding Description	Key factors 1 and 2: less conflict; key factor 3: more conflict Two factors contribute to an expectation of less conflict than in the baseline conflict prediction. This is offset somewhat by an environment with more conflict created by the third factor. This future has a high degree of uncertainty in its conflict prediction because any of the three factors may dominate.		
Rule number	45		
Conflict expectation	Less conflict		
# of key factors	3		
Key factor coding Description	Key factor 1: less conflict; key factor 2: slightly less conflict; key factor 3: baseline One factor contributes to less conflict, one factor contributes to slightly less conflict than in the baseline conflict prediction, leading to an expectation of less conflict than in the baseline conflict prediction. The third factor does not alter the baseline conflict prediction.		
Rule number	46		
Conflict expectation	Less conflict		
# of key factors	3		
Key factor coding	Key factors 1 and 2: less conflict; key factor 3: slightly more conflict		
Description	Two factors contribute to an expectation of less conflict than in the baseline conflict prediction. This may be offset somewhat by an environment with slightly more conflict created by the third factor; however, the expectation is that the two stronger factors will dominate.		
Rule number	47		
Conflict expectation	Less conflict		
# of key factors	3		
Key factor coding	All key factors: slightly less conflict		
Description	All three key factors contribute to an expectation of slightly less conflict than in the baseline conflict prediction. The combination contributes to an expectation of less conflict than in the baseline conflict prediction.		
Rule number	48		
Conflict expectation	Less conflict		
# of key factors	3		
Key factor coding	Key factors 1 and 2: less conflict; key factor 3: baseline		
Description	Two factors contribute to an expectation of less conflict than in the baseline conflict prediction. The third factor does not alter the baseline conflict prediction.		
Rule number	49		
Conflict expectation	Less conflict		
# of key factors	3		
Key factor coding	Key factor 1: less conflict; key factors 2 and 3: slightly less conflict		
Description	One factor contributes to an expectation of less conflict and two factors contribute to an		
	expectation of slightly less conflict than in the baseline conflict prediction. This leads to		
	an expectation of less conflict than in the baseline conflict prediction.		
Rule number	50		
Conflict expectation	Less conflict		
# of key factors	3		
Key factor coding	Key factors 1 and 2: less conflict; key factor 3: slightly less conflict		
Description	Two factors contribute to an expectation of less conflict and one factor contributes to an		
	expectation of slightly less conflict than in the baseline conflict prediction. This leads to		
	an expectation of less conflict than in the baseline conflict prediction.		

Table B.6. Distribution of Alternative Futures by Combinatorial Rule and Conflict Type

Overall Conflict Trend Combinatorial Rule #	Number of Alternative Interstate Conflict Futures	Number of Alternative Intrastate Conflict Futures
1	20	20
2	12	14
3	18	18
4	5	2
5	3	1
6	1	1
7	15	14
8	8	6
9	18	12
10	10	21
11	12	12
12	6	3
13	10	6
14	9	14
15	28	38
16	25	18
17	1	0
18	15	8
19	30	48
20	18	6
21	84	82
22	10	35
23	8	2
24	52	102
	39	28
25		
26	44	32
27	4	0
28	55	78
29	60	30
30	22	16
31	32	45
32	30	12
33	100	96
34	16	48
35	12	4
36	12	16
37	50	82
38	52	42
39	16	4
40	24	15
41	26	28
42	32	32
43	36	18
44	2	0
45	48	30
46	4	8
47	4	1
48	6	6
49	12	5
50	4	1

# Appendix C. Review of the Social Science Literature on the Causes of Conflict

This appendix is published in a separate, web-only report, RR-1063/1-A, *Understanding Conflict Trends: A Review of the Social Science Literature on the Causes of Conflict*, by Stephen Watts et al. You can obtain a free, downloadable PDF of this report on the RAND website at http://www.rand.org/pubs/research\_reports/RR1063z1.html.

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Armed conflict has declined in both frequency and intensity since the end of the Cold War. The trends are especially clear for interstate conflict, but they also hold true for intrastate conflict. Taking into account historical trends and projections of key conflict drivers, the interstate and intrastate baseline future conflict projections in this report depict a continued decline through 2040, with interstate conflict down to extremely low levels and a much lower incidence of intrastate conflict. Some divergence from these projections is likely. The three factors that most strongly increased interstate conflict expectations were declining U.S. preeminence, declining capabilities of international organizations, and declining prevalence of consolidated democracies. The incidence of intrastate conflict is expected to increase if the capacity of state institutions or the rate of economic growth declines. Although the authors' projections indicate that interstate conflict may be rare in the future, the United States must retain a ready and credible land power deterrent to ensure such a future. Such a deterrent might not be used frequently, but its very existence delays the rise of a challenger and has a dampening effect on the incidence of conflict. The authors' projections also indicate that intrastate conflict (including proxy wars) will continue to be the main form of conflict incidence and, given the U.S. position in the international state system, Army forces are likely to become engaged in such conflicts. The trends toward a decrease in conflict incidence do not necessarily mean fewer U.S. interventions.



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